

**Commonwealth of Kentucky  
Environmental and Public Protection Cabinet  
Department for Environmental Protection  
Division for Air Quality  
803 Schenkel Lane  
Frankfort, Kentucky 40601  
(502) 573-3382**

**Draft**

**AIR QUALITY PERMIT  
Issued under 401 KAR 52:020**

**Permittee Name:** Celanese, Ltd.  
**Mailing Address:** 408 North Main Street, Calvert City, KY 42029

**Source Name:** Celanese, Ltd.  
**Mailing Address:** 408 North Main Street  
Calvert City, KY 42029

**Source Location:** 408 North Main Street in Calvert City, KY

**Permit ID:** V-05-076  
**Agency Interest #:** 40292  
**Activity ID:** APE20040001  
**Review Type:** Title V / Synthetic Minor, Construction  
**Source ID:** 21-157-00055

**Regional Office:** Paducah Regional Office  
130 Eagle Nest Drive  
Paducah, KY 42003  
(270) 898-8468

**County:** Marshall

**Application**  
**Complete Date:** December 12, 2002  
**Issuance Date:**  
**Revision Date:**  
**Expiration Date:**

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**John S. Lyons, Director  
Division for Air Quality**

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Permit Number	Permit Type	Log or Activity#	Complete Date	Issuance Date	Summary of Action
<b>VF-03-001</b>	<b>Significant Revision</b>	<b>55706</b>	<b>06/10/03</b>	<b>09/05/03</b>	<b>Construction Permit</b>
<b>V-05-076</b>	<b>Initial Issuance</b>	<b>55050</b>	<b>11/29/02</b>	<b>TBD</b>	<b>Permit Issued</b>

## **SECTION A - PERMIT AUTHORIZATION**

Pursuant to a duly submitted application the Kentucky Division for Air Quality hereby authorizes the operation of the equipment described herein in accordance with the terms and conditions of this permit. This permit has been issued under the provisions of Kentucky Revised Statutes Chapter 224 and regulations promulgated pursuant thereto.

The permittee shall not construct, reconstruct, or modify any affected facilities without first submitting a complete application and receiving a permit for the planned activity from the permitting authority, except as provided in this permit or in 401 KAR 52:020, Title V Permits.

Issuance of this permit does not relieve the permittee from the responsibility of obtaining any other permits, licenses, or approvals required by this Cabinet or any other federal, state, or local agency.

**SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS**INDEX OF EMISSION POINTS LISTED IN SECTION B

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## SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

### POLYMERIZATION PROCESS AREA

EP	Emission Point Description
<b>F01(11-)</b>	<b>Description: Polymerization 50 Line Reactors, Stripper and Auxiliary Equipment</b> <u>Control Device:</u> Will vent to Flare, BA-5000 (see Section B, EP F01) on or before the compliance date in 40 CFR 63.2445(b) for compliance with 40 CFR 63, Subpart FFFF <u>Maximum Processing Rate:</u> 79,000 lb/hr <u>Construction Date:</u> 1984, except F01(11G) installed in 1996 Vent Condenser, HA-5050, will be replaced with vent to Flare, on or before the compliance date in 40 CFR 63.2445(b) for compliance with 40 CFR 63, Subpart FFFF
11A	50 Line Polykettle Preheater, DA-5056 (F01(11A) product stream to F01(11B); exhaust to F01(11C))
11B	50 Line Polykettle 5 (PK5), DC-5051 (F01(11B) product stream to F01(11D); exhaust to F01(11A))
11C	50 Line PK5 Process Condenser, EA-5053 (F01(11C) product stream to F01(11B); exhaust to HA-5050, will exhaust to Flare (EP F01)) MON Group 1 Process Vent
11D	50 Line Polykettle 6 (PK6), DC-5052 (F01(11D) product stream to F01(11F); exhaust to F01(11E))
11E	50 Line PK6 Process Condenser, EA-5054 (F01(11E) product stream to F01(11D); exhaust to HA-5050, will exhaust to Flare (EP F01)) MON Group 1 Process Vent
11F	50 Line Paste Stripper, DA-5051 (F01(11F) product stream to Tank Farm; exhaust to F01(11G))
11G	50 Line Paste Stripper Condenser, EA-5056 (F01(11G) product stream to F01(11H); exhaust to HA-5050, will exhaust to Flare (EP F01)) MON Group 1 Process Vent
11H	50 Line Paste Stripper Accumulator, FA-5052 <u>Capacity:</u> 576 gallons (F01(11H) product stream to F01(11A), F01(11F) or F01(10A); exhaust to HA-5050, will exhaust to Flare (EP F01)) MON Group 1 Process Vent
<b>P01(01)- P01(08)</b>	<b>Polymerization 50 Line Reactors, Stripper and Auxiliary Equipment Startups</b> <u>Description:</u> 20 events/yr not to exceed 80 hr/yr total
<b>F01(12-)</b>	<b>Description: Polymerization 100 Line Reactors and Auxiliary Equipment</b> <u>Control Device:</u> Will vent to Flare, BA-5000 (see Section B, EP F01) on or before the compliance date in 40 CFR 63.2445(b) for compliance with 40 CFR 63, Subpart FFFF <u>Maximum Processing Rate:</u> 79,000 lb/hr <u>Construction Date:</u> 1959, except F01(12C) installed in 1996
12A	100 Line Polykettle Preheater, DA-5106 (F01(12A) product stream to F01(12B); exhaust to F01(12C))
12B	100 Line Polykettle 1 (PK1), DC-5101 (F01(12B) product stream to F01(12D); exhaust to F01(12A))
12C	100 Line PK1 Process Condenser, EA-5103 (F01(12C) product stream to F01(12B); will exhaust to Flare (EP F01)) MON Group 1 Process Vent
12D	100 Line Polykettle 2 (PK2), DC-5102 (F01(12D) product stream to F01(13A); exhaust to F01(12E))
12E	100 Line PK2 Process Condenser, EA-5104 (F01(12E) product stream to F01(12D); will exhaust to Flare (EP F01)) MON Group 1 Process Vent

## SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

EP	Emission Point Description
<b>F01(13-)</b>	<b>Description: Polymerization 100 Line Stripper and Auxiliary Equipment</b> <u>Control Device:</u> Will vent to Flare, BA-5000 (see Section B, EP F01) on or before the compliance date in 40 CFR 63.2445(b) for compliance with 40 CFR 63, Subpart FFFF <u>Maximum Processing Rate:</u> 79,000 lb/hr <u>Construction Date:</u> 1959
13A	100 Line Paste Stripper, DA-5101 (F01(13A) product stream to Tank Farm; exhaust to F01(13B))
13B	100 Line Paste Stripper Condenser, EA-5106 (F01(13B) product stream to F01(13C))
13C	100 Line Paste Stripper Accumulator, FA-5102 <u>Capacity:</u> 576 gallons (F01(13C) product stream to F01(12A), F01(13A) or F01(10A); will exhaust to Flare (EP F01)) MON Group 1 Process Vent
<b>P03(01)- P03(05)</b>	<b>Polymerization 100 Line Reactors, Stripper and Auxiliary Equipment Startups</b> <u>Description:</u> 20 events/yr not to exceed 80 hr/yr total
<b>F01(14-)</b>	<b>Description: Polymerization 150 Line Reactors and Auxiliary Equipment</b> <u>Control Device:</u> Will vent to Flare, BA-5000 (see Section B, EP F01) on or before the compliance date in 40 CFR 63.2445(b) for compliance with 40 CFR 63, Subpart FFFF <u>Maximum Processing Rate:</u> 79,000 lb/hr <u>Construction Date:</u> 1984
14A	150 Line Polykettle Preheater, DA-5156 (F01(14A) product stream to F01(14B); exhaust to F01(14C))
14B	150 Line Polykettle 3 (PK3), DC-5151 (F01(14B) product stream to F01(14D); exhaust to F01(14A))
14C	150 Line PK3 Process Condenser, EA-5153 (F01(14C) product stream to F01(14B); will exhaust to Flare (EP F01)) MON Group 1 Process Vent
14D	150 Line Polykettle 4 (PK4), DC-5152 (F01(14D) product stream to F01(15A); exhaust to F01(14E))
14E	150 Line PK4 Process Condenser, EA-5154 (F01(14E) product stream to F01(14D); will exhaust to Flare (EP F01)) MON Group 1 Process Vent
<b>F01(15-)</b>	<b>Description: Polymerization 150 Line Stripper and Auxiliary Equipment</b> <u>Control Device:</u> Will vent to Flare, BA-5000 (see Section B, EP F01) on or before the compliance date in 40 CFR 63.2445(b) for compliance with 40 CFR 63, Subpart FFFF <u>Maximum Processing Rate:</u> 79,000 lb/hr
15A	150 Line Paste Stripper, DA-5151 <u>Construction Date:</u> 1984 (F01(15A) product stream to Tank Farm; exhaust to F01(15B))
15B	150 Line Paste Stripper Condenser, EA-5156 <u>Construction Date:</u> 1996 (F01(15B) product stream to F01(15C))
15C	150 Line Paste Stripper Accumulator, FA-5152 <u>Capacity:</u> 576 gallons <u>Construction Date:</u> 1959 (F01(15C) product stream to F01(14A), F01(15A) or F01(10A); will exhaust to Flare (EP F01)) MON Group 1 Process Vent
<b>P06(01)- P06(08)</b>	<b>Polymerization 150 Line Reactors, Stripper and Auxiliary Equipment Startups</b> <u>Description:</u> 20 events/yr not to exceed 80 hr/yr total

## SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

EP	Emission Point Description
P02	<b>Description:</b> 50 Line Catalyst Preparation Tanks (2), FA-5051A/B <u>Capacity:</u> 684 gallons each, storing a solution of 8 weight percent DEHA in methanol <u>Construction Date:</u> 1984 <u>Maximum True Vapor Pressure:</u> > 1.24 psia MON Group 2 Storage Tanks
P05	<b>Description:</b> 100 Line Catalyst Preparation Tanks (2), FA-5101A/B <u>Capacity:</u> 272 gallons each, storing a solution of 8 weight percent DEHA in methanol <u>Construction Date:</u> 1959 <u>Maximum True Vapor Pressure:</u> > 1.28 psia MON Group 2 Storage Tanks
P08	<b>Description:</b> 150 Line Catalyst Preparation Tanks (2), FA-5151A/B <u>Capacity:</u> 272 gallons each, storing a solution of 8 weight percent DEHA in methanol <u>Construction Date:</u> 1959 <u>Maximum True Vapor Pressure:</u> > 1.28 psia MON Group 2 Storage Tanks
P09	<b>Description:</b> Phosphoric Acid Tank, FA-5123 <u>Capacity:</u> 500 gallons <u>Construction Date:</u> 1983 <u>Maximum True Vapor Pressure:</u> > 1.28 psia MON Group 2 Storage Tank
P10(--)	<b>Description:</b> DEHA Preparation Tank and Charge Pots MON Group 2 Storage Tanks
01	DEHA Preparation Tank, FA-5118 <u>Capacity:</u> 200 gallons <u>Construction Date:</u> 1990 <u>Maximum True Vapor Pressure:</u> > 1.64 psia
02	DEHA Shortstop Charge Pots (2), HA-5063 and HA-5064 <u>Capacity:</u> 110 gallons each <u>Construction Date:</u> 1984 <u>Maximum True Vapor Pressure:</u> > 1.64 psia
03	DEHA Shortstop Charge Pots (4), HA-5113, HA-5114, HA-5163 and HA-5164 <u>Capacity:</u> 42 gallons each <u>Construction Date:</u> 1959 <u>Maximum True Vapor Pressure:</u> > 1.64 psia
P11	<b>Description:</b> Polymerization Process Unit Fugitives (Approximately 45 Pumps/Agitators, 12 Pressure Relief Valves, 1,295 Valves and 7,924 Connectors)

### **APPLICABLE REGULATIONS:**

This source has elected to accept annual limits in order to preclude the applicability of 401 KAR 51:017, *Prevention of Significant Deterioration of Air Quality* (PSD) for volatile organic compounds.

401 KAR 63:002, Sections 2 and 3(1)(f), which incorporates by reference 40 CFR 63 Subpart H, *National Emission Standards for Organic Hazardous Air Pollutants for Equipment Leaks*, is applicable pursuant to 40 CFR 63, Subpart FFFF, and applies to the equipment leaks.

401 KAR 63:002, Sections 2 and 3(1)(kk), which incorporates by reference 40 CFR 63 Subpart SS, *National Emission Standards for Closed Vent Systems, Control Devices, Recovery Devices and Routing to a Fuel Gas System or a Process*, is applicable pursuant to 40 CFR 63, Subpart

**SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

FFFF, and applies to the closed vent systems routing vapors to a control device and to the flare (EP F01).

401 KAR 63:002, Sections 2 and 3(1)(mmm), which incorporates by reference 40 CFR 63 Subpart FFFF, *National Emission Standards for Hazardous Air Pollutants: Miscellaneous Organic Chemical Manufacturing*, applies to the Polymerization, Saponification, and Polyrectification Areas, as these areas produce polyvinyl alcohol, listed under Table 1 of 40 CFR 63 Subpart B, *Requirements for Control Technology Determinations for Major Sources in Accordance with Clean Air Act Sections, Sections 112(g) and 112(j)*, as a MON Source Category. 40 CFR 63.2455 applies to EP F01(11C), F01(11E), F01(11G), F01(11H), F01(12C), F01(12E), F01(13C), F01(14C), F01(14E) and F01(15C), each as a Group 1 continuous process vent pursuant to 40 CFR 63.2455(b). 40 CFR 63.2470 applies to the Group 2 storage tanks at EP P02, P05, P08, P09 and P10. 40 CFR 63.2480 applies to the equipment leaks.

401 KAR 63:020, *Potentially Hazardous Matter or Toxic Substances*, applies to sources which emit or may emit potentially hazardous or toxic substances.

**NON-APPLICABLE REGULATIONS:**

401 KAR 60:005, Sections 2 and 3(1)(q), which incorporates by reference 40 CFR 60, Subpart Kb (40 CFR 60.112b), *Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced after July 23, 1984*, does not apply to the storage tanks at EP P02, P05, P08 and P10 because the storage capacity of each tank is less than the rule applicability threshold of 75 m<sup>3</sup> (19,812 gallons), and P09 because phosphoric acid is not a VOL.

40 CFR 60, Subpart NNN, *Standards of Performance for Volatile Organic Compound (VOC) Emissions From Synthetic Organic Chemical Manufacturing Industry (SOCMI) Distillation Operations*, is not applicable to the Polymerization Area units, as these units do not produce chemicals listed under 40 CFR 60.667.

40 CFR 60, Subpart RRR, *Standards of Performance for Volatile Organic Compound Emissions from Synthetic Organic Chemical Manufacturing Industry (SOCMI) Reactor Processes*, is not applicable to the Polymerization Area units, as these units do not produce chemicals listed under 40 CFR 60.707.

401 KAR 63:002, Sections 2 and 3(1)(d), which incorporates by reference 40 CFR 63 Subpart F, *National Emission Standards for Organic Hazardous Air Pollutants from the Synthetic Organic Chemical Manufacturing Industry*, and related Subparts G and H, are not applicable to the Polymerization Area units, as these do not produce chemicals listed under Table 1 of 40 CFR 63, Subpart F as a primary product. This determination notwithstanding, specific provisions of Subpart H are included in this section since they are incorporated by reference in 40 CFR 63 Subpart FFFF.

401 KAR 63:002, Sections 2 and 3(1)(lll), which incorporates by reference 40 CFR 63 Subpart EEEE, *National Emission Standards for Hazardous Air Pollutants: Organic Liquids Distribution (Non-Gasoline)*, does not apply to the organic liquid distribution of methanol and vinyl acetate, listed under Table 1 of 40 CFR 63 Subpart EEEE, in the Polymerization Area, because these operations are subject to 40 CFR 63, Subpart FFFF.

**State-Origin Applicable Regulations:**

Permit No. S-95-198R issued on June 4, 1998, Permit No. S-97-054 issued on May 20, 1997,



**SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

Permit No. C-86-172 issued on August 8, 1986, and Permit No. C-84-146 issued on August 21, 1984. See **Section B, Group Requirements**.

**1. Operating Limitations:**

- a. Refer to **Section B, Group Requirements**.
- b. The permittee shall comply with the provisions of 40 CFR Part 63, Subpart FFFF no later than the compliance date of specified in 40 CFR 63.2445(b).
- c. The provisions of 40 CFR Part 63, Subpart A - General Provisions, which are incorporated by reference in 401 KAR 63:002 Section 3(a), apply to the equipment listed in this section that is subject to Subpart FFFF. Table 12 to Subpart FFFF of Part 63 specifies the provisions of Subpart A that apply and those that do not apply. [40 CFR Part 63.2540]

**Process Vents and Closed Vent Systems**

- d. Pursuant to 40 CFR 63.2455(a) and Table 1 of Subpart FFFF, all Group 1 process vents of EP F01(11C), F01(11E), F01(11G), F01(11H), F01(12C), F01(12E), F01(13C), F01(14C), F01(14E) and F01(15C) shall be vented to a flare. See **Section B** for the flare (EP F01).
- e. Pursuant to 40 CFR 63.982(b), as incorporated by reference in 40 CFR Subpart FFFF, the permittee shall comply with the following provisions for the closed vent systems routing the vapors from EP F01(11C), F01(11E), F01(11G), F01(11H), F01(12C), F01(12E), F01(13C), F01(14C), F01(14E) and F01(15C) to the flare: [40 CFR 63.2450(e)(2) and 40 CFR 63.983(a)]
  - (i) Closed vent systems shall be designed and operated to collect the regulated material vapors from the emission points, and to route the collected vapors to a control device. [40 CFR 63.983(a)(1)]
  - (ii) Closed vent systems shall be operated at all times when emissions are vented to, or collected by, them. [40 CFR 63.983(a)(2)]
- f. Except for equipment needed for safety purposes such as pressure relief devices, low leg drains, high point bleeds, analyzer vents, and open-ended valves or lines, the permittee shall comply with the provisions of either of the following paragraphs (i) or (ii) below for each closed vent system that contains bypass lines that could divert a vent stream to the atmosphere. [40 CFR 63.983(a)(3)]
  - (i) Properly install, maintain, and operate a flow indicator at the entrance to any bypass line that is capable of taking periodic readings.
  - (i) Secure the bypass line valve in the non-diverting position with a car-seal or a lock-and-key type configuration.
- g. If there are visible, audible, or olfactory indications of leaks at the time of the annual visual inspections required by 40 CFR 63.983(b)(1)(i)(B), the permittee shall comply with either of the following procedures. [40 CFR 63.983(d)(1)]
  - (i) Eliminate the leak.
  - (ii) Monitor the equipment according to the procedures in 40 CFR 63.983(c).
- h. Leaks, as indicated by an instrument reading greater than 500 ppm by volume above background or by visual inspections, shall be repaired as soon as practical. [40 CFR 63.983(d)(2)]

**SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

- (i) A first attempt at repair shall be made no later than 5 days after the leak is detected.
- (ii) Except as provided in 40 CFR 63.983(d)(3) for delay of repair, repairs shall be completed no later than 15 days after the leak is detected or at the beginning of the next introduction of vapors to the system, whichever is later.

**Pipeline Equipment**

- i. Pursuant to 40 CFR 63.2480(a) and Table 6 to Subpart FFFF, for the pipeline equipment in organic hazardous air pollutant service, the permittee shall implement a leak detection and repair (LDAR) program in accordance with 40 CFR 63, Subpart H containing the following elements:
  - (i) Each piece of pipeline equipment subject to 40 CFR 63 Subpart FFFF shall be identified such that it can be distinguished readily from equipment that is not subject to 40 CFR 63 Subpart H. [40 CFR 63.162(c)]
  - (ii) When a leak is detected as specified in 40 CFR 63.163 and 63.164; 63.168 and 63.169; and 63.172 through 63.174, the permittee shall: [40 CFR 63.162(f)]
    - (1) Clearly identify the leaking equipment.
    - (2) The identification on a valve may be removed after it has been monitored as specified in 40 CFR 63.168(f)(3) and 63.175(e)(7)(i)(D), and no leak has been detected during the follow-up monitoring. If the permittee elects to comply using the provisions of 40 CFR 63.174(c)(1)(i), the identification on a connector may be removed after it is monitored and no leak is detected during that monitoring.
    - (3) The identification which has been placed on equipment determined to have a leak, except for a valve or for a connector that is subject to 40 CFR 63.174(c)(1)(i), may be removed after it is repaired.
  - (iii) Specific standards for each type of pipeline equipment described under 2.

**Emission Limitations.****Compliance Demonstration Method:**

- a. Refer to **Section B, Group Requirements**.
- b. Refer to **4. Specific Monitoring Requirements** for Process Vents and Closed Vent Systems.

**Pipeline Equipment**

- c. Compliance shall be determined by review of the records required by 40 CFR 63.181 and the reports required by 40 CFR 63.182, review of performance test results, and by inspections. [40 CFR 63.162(a)]

**2. Emission Limitations:**

- a. Refer to **Section B, Group Requirements**.
- b. Pursuant to 401 KAR 63:020, no owner or operator shall allow any affected facility to emit potentially hazardous matter or toxic substances in such quantities

**SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

or duration as to be harmful to the health and welfare of humans, animals and plants.

Pipeline Equipment

- c. Pursuant to 40 CFR 63.2480(a) and Table 6 to Subpart FFFF, the permittee shall comply with the fugitive emissions standards of 40 CFR 63, Subpart H, as applicable. See below for detailed standards for different services:

- (i) Standards: Pumps in light liquid service [40 CFR 63.163]:
  - 40 CFR 63.163(a): Implementation and compliance provisions
  - 40 CFR 63.163(b): Monitoring requirements, leak detection levels, frequency of monitoring
  - 40 CFR 63.163(c): Repair procedures and time frames
  - 40 CFR 63.163(d): Procedures to determine percent leaking pumps and quality improvement program requirements
  - 40 CFR 63.163(e)-(j): Exemptions for specific types of pumps
- (ii) Standards: Compressors [40 CFR 63.164]:
  - 40 CFR 63.164(a)-(e): Operational requirements
  - 40 CFR 63.164(f): Criteria for leak detection
  - 40 CFR 63.164(g): Repair procedures and time frames
  - 40 CFR 63.164(h)-(i): Exemptions for specific types of compressors
- (iii) Standards: Pressure relief devices in gas/vapor service [40 CFR 63.165]:
  - 40 CFR 63.165(a): Operational requirements
  - 40 CFR 63.165(b): Pressure release procedures
  - 40 CFR 63.165(c)-(d): Exemptions for specific types of pressure relief devices
- (iv) Standards: Sampling Connection Systems [40 CFR 63.166]:
  - 40 CFR 63.166(a)-(b): Operational requirements
  - 40 CFR 63.166(c): Exemptions for specific types of sampling connection systems
- (v) Standards: Open-ended valves or lines [40 CFR 63.167]:
  - 40 CFR 63.167(a)-(c): Operational requirements
  - 40 CFR 63.167(d)-(e): Exemptions for specific types of valves
- (vi) Standards: Valves in gas/vapor service and in light liquid service [40 CFR 63.168]:
  - 40 CFR 63.168(a): Operational requirements
  - 40 CFR 63.168(b)-(d): Monitoring requirements and intervals
  - 40 CFR 63.168(e): Procedures to determine percent leaking valves
  - 40 CFR 63.168(f): Leak repair time frames
  - 40 CFR 63.168(g): First attempt repair procedures
  - 40 CFR 63.168(h): Exemptions for unsafe-to-monitor valves
  - 40 CFR 63.168(i): Exemptions for difficult-to-monitor valves
- (vii) Standards: Instrumentation systems [40 CFR 63.169]:
  - 40 CFR 63.169(a): Monitoring frequency
  - 40 CFR 63.169(b): Leak detection levels
  - 40 CFR 63.169(c): Leak repair time frames
- (viii) Standards: Delay of repair [40 CFR 63.171]:

**SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

- 40 CFR 63.171 Allowances for delay of repair
- (ix) Standards: Closed-vent systems and control devices [40 CFR 63.172]:
  - 40 CFR 63.172(a)-(b): Operational requirements
  - 40 CFR 63.172(d),(m): Control device requirements
  - 40 CFR 63.172(f)-(g): Monitoring requirements
  - 40 CFR 63.172(h)-(i): Repair procedures and time frames
  - 40 CFR 63.172 (j): Operational requirements for bypass lines
  - 40 CFR 63.172(k)-(l): Exemptions for unsafe-to-inspect and difficult-to-inspect closed-vent systems
- (x) Standards: Agitators in gas/vapor service and in light liquid service [40 CFR 63.173]:
  - 40 CFR 63.173(a): Operational requirements
  - 40 CFR 63.173(b): Monitoring requirements and intervals
  - 40 CFR 63.173(c): Leak repair time frames
  - 40 CFR 63.173(d)-(g): Exemptions for specific types of agitators
  - 40 CFR 63.173(h)-(j): Exemptions for difficult-to-monitor, inaccessible or unsafe-to-monitor agitators
- (xi) Standards: connectors in gas/vapor service and in light liquid service.

Pursuant to 40 CFR 63.2480(b)(4), the permittee may elect to comply with the standards in 40 CFR 63.174 or the standards in 40 CFR 63.169 for connectors in heavy liquid service:

  - 40 CFR 63.169(a) Monitoring frequency
  - 40 CFR 63.169(b) Leak detection levels
  - 40 CFR 63.169(c) Leak repair time frames
  - 40 CFR 63.174(a): Operational requirements
  - 40 CFR 63.174(b): Monitoring requirements and intervals
  - 40 CFR 63.174(c): Procedures for open connectors or connectors with broken seals
  - 40 CFR 63.174(d): Leak repair time frames
  - 40 CFR 63.174(e): Monitoring frequency for repaired connectors
  - 40 CFR 63.174(f)-(h): Exemptions for unsafe-to-monitor, unsafe-to-repair, inaccessible, or ceramic connectors
  - 40 CFR 63.174(i): Procedures to determine percent leaking connectors
  - 40 CFR 63.174(j): Optional credit for removed connectors
- (xii) Quality improvement program for valves [40 CFR 63.175]: Pursuant to 40 CFR 63.168(d)(1)(ii), in Phase III, the permittee may elect to implement the following quality improvement programs if the percent of leaking valves is equal to or exceeds 2 percent:
  - 40 CFR 63.175(a): Quality improvement program alternatives
  - 40 CFR 63.175(b): Criteria for ending quality improvement programs
  - 40 CFR 63.175(c): Alternatives following achievement of less than 2 percent leaking valves target
  - 40 CFR 63.175(d): Quality improvement program to demonstrate further progress

**SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

- 40 CFR 63.175(e): Quality improvement program of technology review and improvement
- (xiii) Quality improvement program for pumps [40 CFR 63.176]: Pursuant to 40 CFR 63.163(d)(2), if, in Phase III, calculated on a 6-month rolling average, the greater of either 10 percent of the pumps or three pumps in the Polymerization, Saponification, or Polyrectification Areas leak, the permittee shall implement the following quality improvement programs for pumps:
- 40 CFR 63.176(a): Applicability criteria
- 40 CFR 63.176(b): Criteria for ending the quality improvement program
- 40 CFR 63.176(c): Criteria for resumption of the quality improvement program
- 40 CFR 63.176(d): Quality improvement program elements
- (xiv) The requirements for pressure testing in 40 CFR 63.178(b) may be applied to all processes, not just batch processes. The permittee may elect to use pressure testing of equipment to demonstrate compliance by meeting the following requirements of 40 CFR 63.178(b). Compliance with the provisions of 40 CFR 63.178(b) exempts the permittee from the monitoring provisions of 40 CFR 63.163, 63.168 and 63.169, and 63.173 through 63.176. [40 CFR 63.2480(b)(1) and 63.178(b)]
- (1) The permittee may switch among the alternatives provided the change is documented as specified in 40 CFR 63.181.[40 CFR 63.178(a)]
- (2) For the purposes of 40 CFR 63 Subpart FFFF, pressure testing for leaks in accordance with 63.178(b) is not required after reconfiguration of an equipment train if flexible hose connections are the only disturbed equipment.

**Compliance Demonstration Method:**

- a. Refer to **Section B, Group Requirements**.
- b. For compliance with 401 KAR 63:020, if the source alters process rates, material formulations, or any other factor that would result in an increase of HAP emissions or the addition of HAP emissions not previously evaluated by the Division, the source shall submit the appropriate application forms pursuant to 401 KAR 52:020, along with air modeling to show that the facility will remain in compliance with 401 KAR 63:020. The source may perform a screening analysis of the potential to emit of acetaldehyde, methanol, methyl acetate, phosphoric acid, vinyl acetate, and any other toxic pollutant emissions at the plant and compare it to established benchmarks (i.e. Reference Concentrations (RfCs), Unit Risk Estimates (UREs), as applicable).

Pipeline Equipment

- c. Compliance shall be determined by review of the records required by 40 CFR 63.181 and by inspections. [40 CFR 63.162(a)]

**SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)****3. Testing Requirements:**Process Vents

- a. Refer to **3. Testing Requirements** for the flare (**Section B**, EP F01).

Pipeline Equipment

- b. The permittee shall comply with the following test methods and procedures requirements pursuant to 40 CFR 63.180(a):
- (i) Monitoring shall comply with Method 21 of 40 CFR part 60, appendix A. [40 CFR 63.180(b)(1)]
  - (ii) The detection instrument shall meet the performance criteria of Method 21 of 40 CFR part 60, appendix A, except the instrument response factor criteria in Section 3.1.2(a) of Method 21 shall be for the average composition of the process fluid not each individual VOC in the stream. For process streams that contain nitrogen, water, air, or other inerts which are not organic HAPs or VOCs, the average stream response factor may be calculated on an inert-free basis. The response factor may be determined at any concentration for which monitoring for leaks will be conducted. If no instrument is available at the plant site that will meet the performance criteria, the instrument readings may be adjusted by multiplying by the average response factor of the process fluid, calculated on an inert-free basis. [40 CFR 63.180(b)(2)]
  - (iii) The instrument shall be calibrated before use on each day of its use by the procedures specified in Method 21 of 40 CFR part 60, appendix A. [40 CFR 63.180(b)(3)]
  - (iv) Calibration gases shall be: [40 CFR 63.180(b)(4)]
    - (1) Zero air (less than 10 parts per million of hydrocarbon in air); and
    - (2) Mixtures of methane in air at the concentrations specified in paragraphs 63.180(b)(4)(ii)(A) through (b)(4)(ii)(C). A calibration gas other than methane in air may be used if the instrument does not respond to methane or if the instrument does not meet the performance criteria specified in 40 CFR 63.180(b)(2)(i). In such cases, the calibration gas may be a mixture of one or more of the compounds to be measured in air.
    - (3) The instrument may be calibrated at a higher methane concentration than the concentration specified for that piece of equipment. The concentration of the calibration gas may exceed the concentration specified as a leak by no more than 2,000 parts per million. If the monitoring instrument's design allows for multiple calibration scales, then the lower scale shall be calibrated with a calibration gas that is no higher than 2,000 parts per million above the concentration specified as a leak and the highest scale shall be calibrated with a calibration gas that is approximately equal to 10,000 parts per million. If only one scale on an instrument will be used during monitoring, the permittee need not calibrate the scales that will not be used during that day's monitoring.

**SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

- (v) Monitoring shall be performed when the equipment is in organic HAP service, in use with an acceptable surrogate volatile organic compound which is not an organic HAP, or is in use with any other detectable gas or vapor. [40 CFR 63.180(b)(5)]
- (vi) Monitoring data that do not meet the criteria specified in 40 CFR 63.180(b)(1) through (b)(5) may be used to qualify for less frequent monitoring under the provisions in 40 CFR 63.168(d)(2) and (d)(3) or 63.174(b)(3)(ii) or (b)(3)(iii) provided the data meet the following conditions. [40 CFR 63.180(b)(6)]
  - (1) The data were obtained before April 22, 1994.
  - (2) The departures from the criteria specified in 40 CFR 63.180(b)(1) through (b)(5) or from the specified monitoring frequency of 40 CFR 63.168(c) are minor and do not significantly affect the quality of the data. Examples of minor departures are monitoring at a slightly different frequency (such as every six weeks instead of monthly or quarterly), following the performance criteria of section 3.1.2(a) of Method 21 of appendix A of 40 CFR part 60 instead of 40 CFR 63.180(b)(2), or monitoring at a different leak definition if the data would indicate the presence or absence of a leak at the concentration specified in this subpart. Failure to use a calibrated instrument is not considered a minor departure.
- (vii) When equipment is monitored for compliance as required in 40 CFR 63.164(i), 63.165(a), and 63.172(f) or when equipment subject to a leak definition of 500 ppm is monitored for leaks as required by 40 CFR 63 Subpart H, the permittee may elect to adjust or not to adjust the instrument readings for background. If the permittee elects to not adjust instrument readings for background, the permittee shall monitor the equipment according to the procedures specified in 40 CFR 63.180(b)(1) through (b)(4). In such case, all instrument readings shall be compared directly to the applicable leak definition to determine whether there is a leak. If the permittee elects to adjust instrument readings for background, the permittee shall monitor the equipment according to the following procedures. [40 CFR 63.180(c)]
  - (1) The requirements of 40 CFR 63.180(b)(1) through (4) shall apply.
  - (2) The background level shall be determined, using the same procedures that will be used to determine whether the equipment is leaking.
  - (3) The instrument probe shall be traversed around all potential leak interfaces as close to the interface as possible as described in Method 21 of 40 CFR part 60, appendix A.
  - (4) The arithmetic difference between the maximum concentration indicated by the instrument and the background level is compared with 500 parts per million for determining compliance.
- (viii) (1) Each piece of equipment within a process unit that can reasonably be expected to contain equipment in organic HAP service is presumed to be in organic HAP service unless the permittee

**SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

demonstrates that the piece of equipment is not in organic HAP service. For a piece of equipment to be considered not in organic HAP service, it must be determined that the percent organic HAP content can be reasonably expected not to exceed 5 percent by weight on an annual average basis. For purposes of determining the percent organic HAP content of the process fluid that is contained in or contacts equipment, Method 18 of 40 CFR part 60, appendix A shall be used. [40 CFR 63.180(d)]

- (2) (A) The permittee may use good engineering judgment rather than the procedures in 40 CFR 63.180(d)(1) to determine that the percent organic HAP content does not exceed 5 percent by weight. When the permittee and the Division do not agree on whether a piece of equipment is not in organic HAP service, however, the procedures in 40 CFR 63.180(d)(1) shall be used to resolve the disagreement.
- (B) Conversely, the permittee may determine that the organic HAP content of the process fluid does not exceed 5 percent by weight by, for example, accounting for 98 percent of the content and showing that organic HAP is less than 3 percent.
- (3) If the permittee determines that a piece of equipment is in organic HAP service, the determination can be revised after following the procedures in 40 CFR 63.180(d)(1), or by documenting that a change in the process or raw materials no longer causes the equipment to be in organic HAP service.
- (4) Samples used in determining the percent organic HAP content shall be representative of the process fluid that is contained in or contacts the equipment.

**4. Specific Monitoring Requirements:**

- a. Refer to **Section B, Group Requirements**.

**Process Vents and Closed Vent Systems**

- b. Refer to, **4. Specific Monitoring Requirements** for the flare (**Section B, EP F01**).
- c. Except for any closed vent systems that are designated as unsafe or difficult to inspect as provided in 40 CFR 63.983(b)(2) and (3), the permittee shall comply with the following requirements for each closed vent system. [40 CFR 63.983(b)(1)(i)]
  - (i) Conduct an initial inspection according to the procedures in 40 CFR 63.983(c); and
  - (ii) Conduct annual inspections for visible, audible, or olfactory indications of leaks.
- d. For each bypass line, the permittee shall comply with either of the following requirements. [40 CFR 63.983(b)(4)]
  - (i) If a flow indicator is used, take a reading at least once every 15 minutes.



**SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

- (ii) If the bypass line valve is secured in the non-diverting position, visually inspect the seal or closure mechanism at least once every month to verify that the valve is maintained in the non-diverting position, and the vent stream is not diverted through the bypass line.

Pipeline Equipment

- e. Refer to **3. Testing Requirements**.
- f. Fulfill all monitoring requirements per **2. Emission Limitations**.

**5. Specific Recordkeeping Requirements:**

- a. Refer to **Section B, Group Requirements**.
- b. All records shall be maintained in accordance with **Section F.2**.
- c. The permittee shall keep the following records: [40 CFR 63.2525]
  - (i) Each applicable record required by 40 CFR 63 Subpart A and in referenced subparts F, G and SS of this part 63. [40 CFR 63.2525(a)]
  - (ii) Records of each operating scenario as specified: [40 CFR 63.2525(b)]
    - (1) A description of the process and the type of process equipment used.
    - (2) An identification of related process vents, including their associated emissions episodes if not complying with the alternative standard in 40 CFR 63.2505; wastewater point of determination (POD); storage tanks; and transfer racks.
    - (3) The applicable control requirements of 40 CFR 63 Subpart FFFF, including the level of required control, and for vents, the level of control for each vent.
    - (4) The control device or treatment process used, as applicable, including a description of operating and/or testing conditions for any associated control device.
    - (5) The process vents, wastewater POD, transfer racks, and storage tanks (including those from other processes) that are simultaneously routed to the control device or treatment process(s).
    - (6) The applicable monitoring requirements of this subpart and any parametric level that assures compliance for all emissions routed to the control device or treatment process.
    - (7) Calculations and engineering analyses required to demonstrate compliance.
    - (8) For reporting purposes, a change to any of these elements not previously reported, except for 40 CFR 63.2525(b)(5), constitutes a new operating scenario.
  - (iii) In the SSMP required by 40 CFR 63.6(e)(3), the permittee is not required to include Group 2 emission points, unless those emission points are used in an emissions average. For equipment leaks, the SSMP requirement is limited to control devices and is optional for other equipment. [40 CFR 63.2525(j)]

**SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**Process Vents and Closed Vent Systems

- d. The permittee shall keep records as specified in **5. Specific Recordkeeping Requirements** for the flare (**Section B**, EP F01).
- e. For the closed vent systems, the permittee shall record the following information. [40 CFR 63.998(d)(1)]
  - (i) The identification of all parts of the closed vent system that are designated as unsafe or difficult to inspect, an explanation of why the equipment is unsafe or difficult to inspect, and the plan for inspecting the equipment required by 40 CFR 63.983(b)(2)(ii) or (iii).
  - (ii) The information specified in either 63.998(d)(1)(ii)(A) or (B), as applicable, for each closed vent system that contains bypass lines that could divert a vent stream away from the flare and to the atmosphere. [40 CFR 63.998(d)(1)(ii)]
    - (1) Hourly records of whether the flow indicator specified under 40 CFR 63.983(a)(3)(i) was operating and whether a diversion was detected at any time during the hour, as well as records of the times of all periods when the vent stream is diverted from the flare or the flow indicator is not operating; or
    - (2) Where a seal mechanism is used to comply with 63.983(a)(3)(ii), hourly records of flow are not required. In such cases, the permittee shall record that the monthly visual inspection of the seals or closure mechanisms has been done, and shall record the occurrence of all periods when the seal mechanism is broken, the bypass line valve position has changed, or the key for a lock-and-key type lock has been checked out, and records of any car-seal that has been broken.
  - (iii) The following information, when a leak is detected as specified in 40 CFR 63.983(d)(2). These records shall be kept for 5 years. [40 CFR 63.998(d)(1)(iii)]
    - (1) The instrument and equipment identification number and the operator name, initials, or identification number.
    - (2) The date the leak was detected and the date of the first attempt to repair the leak.
    - (3) The date of successful repair of the leak.
    - (4) The maximum instrument reading measured by the procedures in 40 CFR 63.983(c) after the leak is successfully repaired or determined to be nonrepairable.
    - (5) "Repair delayed" and the reason for the delay if a leak is not repaired within 15 days after discovery of the leak. The permittee may develop a written procedure that identifies the conditions that justify a delay of repair. In such cases, reasons for delay of repair may be documented by citing the relevant sections of the written procedure.
    - (6) Copies of the Periodic Reports as specified in 40 CFR 63.999(c), if records are not maintained on a computerized database capable of generating summary reports from the records.

**SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

- (iv) For each instrumental or visual inspection conducted in accordance with 63.983(b)(1) during which no leaks are detected, a record that the inspection was performed, the date of the inspection, and a statement that no leaks were detected. [40 CFR 63.998(d)(iv)]

**Pipeline Equipment**

- f. The permittee may comply with the recordkeeping requirements for the equipment in the Polymerization, Saponification and Polyrectification Areas in one recordkeeping system if the system identifies each record by process unit and the program being implemented (e.g., quarterly monitoring, quality improvement) for each type of equipment. All records required by 40 CFR 63.181 shall be maintained in a manner that can be readily accessed at the plant site. [40 CFR 63.181(a)]
- g. The permittee shall maintain all records pertaining to the pipeline equipment required by 40 CFR 63.181(b).
  - (i) (1) A list of identification numbers for equipment (except instrumentation systems) subject to the requirements of this subpart. [40 CFR 63.181(b)(1)(i)]
  - (2) A schedule by process unit for monitoring connectors subject to 40 CFR 63.174(a) and valves subject to 40 CFR 63.168(d).
  - (3) Physical tagging of the equipment to indicate that it is in organic HAP service is not required. Equipment subject to the provisions of this subpart may be identified on a plant site plan, in log entries, or by other appropriate methods.
  - (ii) (1) A list of identification numbers for equipment that the permittee elects to equip with a closed-vent system and control device, under the provisions of 40 CFR 63.163(g), 63.164(h), 63.165(c), or 63.173(f). [40 CFR 63.181(b)(2)(i)]
  - (2) A list of identification numbers for compressors that the permittee elects to designate as operating with an instrument reading of less than 500 parts per million above background, under the provisions of 40 CFR 63.164(i).
  - (iii) A list of identification numbers for pressure relief devices subject to 40 CFR 63.165(a) and for pressure relief devices equipped with rupture disks, under the provisions of 40 CFR 63.165(d). [40 CFR 63.181(b)(3)]
  - (iv) Identification of instrumentation systems subject to 40 CFR 63 Subpart H. Individual components in an instrumentation system need not be identified.
  - (v) Identification of screwed connectors subject to 40 CFR 63.174(c)(2). Identification can be by area or grouping as long as the total number within each group or area is recorded.
  - (vi) The following information shall be recorded for each dual mechanical seal system:
    - (1) Design criteria required in 40 CFR 63.163(e)(6)(i), 63.164(e)(2), and 63.173(d)(6)(i) and an explanation of the design criteria; and
    - (2) Any changes to these criteria and the reasons for the changes.

**SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

- (vii) The following information pertaining to all pumps subject to 40 CFR 63.163(j), valves subject to 40 CFR 63.168(h) and (i), agitators subject to 40 CFR 63.173(h) through (j), and connectors subject to 40 CFR 63.174(f) and (g) shall be recorded:
  - (1) Identification of equipment designated as unsafe to monitor, difficult to monitor, or unsafe to inspect and the plan for monitoring or inspecting this equipment.
  - (2) A list of identification numbers for the equipment that is designated as difficult to monitor, an explanation of why the equipment is difficult to monitor, and the planned schedule for monitoring this equipment.
  - (3) A list of identification numbers for connectors that are designated as unsafe to repair and an explanation why the connector is unsafe to repair.
- (viii)
  - (1) A list of valves removed from and added to the process unit, as described in 40 CFR 63.168(e)(1), if the net credits for removed valves is expected to be used.
  - (2) A list of connectors removed from and added to the process unit, as described in 40 CFR 63.174(i)(1), and documentation of the integrity of the weld for any removed connectors, as required in 40 CFR 63.174(j). This is not required unless the net credits for removed connectors is expected to be used.
- (ix) For any leaks detected as specified in 40 CFR 63.163 and 63.164; 63.168; and 63.172 through 63.174, a weatherproof and readily visible identification, marked with the equipment identification number, shall be attached to the leaking equipment.
- h. For visual inspections, the permittee shall document that the inspection was conducted and the date of the inspection. These records shall be kept for two years. [40 CFR 63.181(c)]
- i. When a leak is detected, the following information shall be recorded and kept for two years. [40 CFR 63.181(d)]
  - (i) The instrument and the equipment identification number and the operator name, initials, or identification number.
  - (ii) The date the leak was detected and the date of first attempt to repair the leak.
  - (iii) The date of successful repair of the leak.
  - (iv) Maximum instrument reading measured by Method 21 of 40 CFR part 60, appendix A after it is successfully repaired or determined to be nonrepairable.
  - (v) "Repair delayed" and the reason for the delay if a leak is not repaired within 15 calendar days after discovery of the leak.
    - (1) The permittee may develop a written procedure that identifies the conditions that justify a delay of repair. The written procedures may be included as part of the startup/shutdown/malfunction plan, required by 40 CFR 63.6(e)(3), for the source or may be part of a separate document that is maintained at the plant site. In such

**SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

- cases, reasons for delay of repair may be documented by citing the relevant sections of the written procedure.
- (2) If delay of repair was caused by depletion of stocked parts, there must be documentation that the spare parts were sufficiently stocked on-site before depletion and the reason for depletion.
  - (vi) Dates of process unit shutdowns that occur while the equipment is unrepaired.
  - (vii) (1) Identification, either by list, location (area or grouping), or tagging of connectors that have been opened or otherwise had the seal broken since the last monitoring period required in 40 CFR 63.174(b), as described in 40 CFR 63.174(c)(1), unless the permittee elects to comply with 63.174(c)(1)(ii).
  - (2) The date and results of monitoring as required in 40 CFR 63.174(c). If identification of connectors that have been opened or otherwise had the seal broken is made by location under 40 CFR 63.181(d)(7)(i), then all connectors within the designated location shall be monitored.
  - (viii) Copies of the periodic reports as specified in 40 CFR 63.182(d), if records are not maintained on a computerized database capable of generating summary reports from the records.
  - j. If the permittee elects to comply with the pressure testing requirements in accordance with **2.c.(xiv) Emission Limitations**, the permittee is exempt from the requirements of paragraphs g, h, i and k of this section. Instead, the permittee shall maintain records as specified in 40 CFR 63.181(e).
  - k. The results of compliance tests required for compressors and the dates and results of monitoring following a pressure relief valve pressure release shall be recorded. The results shall include: [40 CFR 63.181(f)]
    - (i) The background level measured during each compliance test.
    - (ii) The maximum instrument reading measured at each piece of equipment during each compliance test.
  - l. The permittee shall maintain records required for closed-vent systems and control devices subject to 40 CFR 63.172. [40 CFR 63.181 (g)]
    - (i) The design specifications and performance demonstrations specified in 40 CFR 63.181(g)(1)(i) through (g)(1)(iv) shall be retained for the life of the equipment.
      - (1) Detailed schematics, design specifications of the control device, and piping and instrumentation diagrams.
      - (2) The dates and descriptions of any changes in the design specifications.
      - (3) The flare design (i.e., steam-assisted, air-assisted, or non-assisted) and the results of the compliance demonstration required by 40 CFR 63.11(b) of 40 CFR 63 Subpart A.
      - (4) A description of the parameter or parameters monitored, as required in 40 CFR 63.172(e), to ensure that control devices are operated and maintained in conformance with their design and an

**SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

- explanation of why that parameter (or parameters) was selected for the monitoring.
- (ii) Records of operation of closed-vent systems and control devices, as specified in 40 CFR 63.181(g)(2)(i) through (g)(2)(iii) shall be retained for 2 years.
    - (1) Dates and durations when the closed-vent systems and control devices required in 40 CFR 63.163 through 63.166, and 63.170 are not operated as designed as indicated by the monitored parameters, including periods when a flare pilot light system does not have a flame.
    - (2) Dates and durations during which the monitoring system or monitoring device is inoperative.
    - (3) Dates and durations of start-ups and shutdowns of control devices required in 40 CFR 63.163 through 63.166, and 63.170.
  - (iii) Records of inspections of closed-vent systems subject to the provisions of 40 CFR 63.172, as specified in 40 CFR 63.181(g)(3)(i) and (g)(3)(ii) shall be retained for 2 years.
    - (1) For each inspection conducted in accordance with the provisions of 40 CFR 63.172(f)(1) or (f)(2) during which no leaks were detected, a record that the inspection was performed, the date of the inspection, and a statement that no leaks were detected.
    - (2) For each inspection conducted in accordance with 63.172(f)(1) or (f)(2) during which leaks were detected, the information specified in 40 CFR 63.181(d) shall be recorded.
  - m. If the permittee implements any of the quality improvement programs required by 40 CFR 63.175 or 63.176, the records specified in 40 CFR 63.181(h) shall be maintained for a period of the quality improvement plan for the process unit.

**6. Specific Reporting Requirements:**

- a. Refer to **Section B, Group Requirements**.
- b. For equipment subject to 40 CFR 63 Subpart FFFF, the permittee shall submit the following reports:
  - (i) 40 CFR 63.2515(b), Initial Notification – The permittee has fulfilled this requirement through documentation dated March 8, 2004 submitted to U.S. EPA Region IV and the Division.
  - (ii) A notification of performance test at least 60 calendar days before the performance test is scheduled to begin as required in 40 CFR 63.7(b)(1), if applicable. [40 CFR 63.2515(c)]
  - (iii) A notification of compliance status report containing the information specified in 40 CFR 63.2520(d) no later than 150 days after the compliance date specified in 40 CFR 63.2445.
  - (iv) A Compliance report containing the information specified in 40 CFR 63.2520(e) semiannually according to the requirements in 40 CFR 63.2520(b).
- c. The permittee shall furnish reports as specified in **5. Specific Reporting Requirements**.

**SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

- d. Also refer to **Section F.5.**

Process Vents and Closed Vent Systems

- e. The permittee shall furnish reports as specified in **5. Specific Reporting Requirements** for the flare (**Section B**, EP F01).
- f. The permittee shall submit, as part of the periodic report: [40 CFR 63.999(c)(2)]
- (i) The information recorded in 40 CFR 63.998(d)(1)(iii)(B) through (E);
  - (ii) Reports of the times of all periods recorded under 40 CFR 63.998(d)(1)(ii)(A) when the vent stream is diverted from the flare through a bypass line; and
  - (iii) Reports of all times recorded under 40 CFR 63.998(d)(1)(ii)(B) when maintenance is performed in car-sealed valves, when the seal is broken, when the bypass line valve position is changed, or the key for a lock-and-key type configuration has been checked out.

**7. Specific Control Equipment Operating Conditions:**

Process Vents

The flare (EP F01) shall be in operation at all times the emission units that vent to the flare are operating. See **Section B** for EP F01.

**8. Alternate Operating Scenarios:**

- a. For the occurrences of start-ups at EP P01, P03 or P06, the permittee shall follow the Startup, Shutdown, and Malfunction Plan requirements of 40 CFR 63 Subparts A and FFFF.
- b. For the pipeline equipment subject to 40 CFR 63.2480(a) and Table 6 to Subpart FFFF, the permittee may comply with one of the following requirements.
- (i) Subpart UU of 40 CFR 63 and the requirements referenced therein, except as specified in §63.2480(b) and (d);
  - (ii) Subpart H of 40 CFR 63 and the requirements referenced therein, except as specified in §63.2480(b) and (d); or
  - (iii) 40 CFR 65, subpart F and the requirements referenced therein, except as specified in §63.2480(c) and (d).

## SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

### SAPONIFICATION (SAP) PROCESS AREA

EP	Emission Point Description
S01(--)	<p><b>Description: Saponification Process Unit</b>, consisting of Four (4) Parallel Production Lines</p> <p><u>Control Device</u>: Countercurrent, crossflow packed bed scrubber, identified as 600 SAP Vent Scrubber, DA-5602/DA-5604</p> <p><u>Scrubbing Liquid</u>: Water, methanol and methyl acetate</p> <p><u>Scrubbing Liquid Flow Rate</u>: 35 gal/min on or before the compliance date in 40 CFR 63.2445(b) for compliance with 40 CFR 63, Subpart FFFF; 16.3 gal/min prior to compliance with Subpart FFFF</p> <p><u>Control Efficiency</u>: 99% for Methyl Alcohol, 99% for Methyl Acetate on or before the compliance date in 40 CFR 63.2445(b) for compliance with 40 CFR 63, Subpart FFFF; 96% for Methyl Acetate prior to compliance with Subpart FFFF</p> <p><u>Construction Date</u>: 1985</p> <p>600 SAP Vent Scrubber, DA-5602/DA-5604, is a MON Recovery device and a MON Group 2 Process Vent</p>
S01(A-)	<p><b>Description: Saponification 200 Line Process</b></p> <p><u>Maximum Processing Rate</u>: 41,485 lb/hr</p> <p><u>Construction Date</u>: 1959</p>
A1	200 Line Paste Mixer, GD-5201 A/B
A2	200 Line Belt Saponifier, DC-5201
A3	200 Line Primary Crushing Mill (#1 PCM), PA-5201
A4	200 Line Slurry Grinder (#2 PCM), PA-5202
A5	<p>200 Line Slurry Tank, FA-5201</p> <p><u>Capacity</u>: 1,940 gallons</p> <p><u>Maximum True Vapor Pressure</u>: &gt; 1 psia</p> <p>MON Group 2 Batch Process Vent</p>
A6	200 Line Centrifuge, JB-5201
A7	<p>200 Line Filtrate Tank, FA-5214</p> <p><u>Capacity</u>: 415 gallons</p> <p><u>Maximum True Vapor Pressure</u>: &gt; 1 psia</p> <p>MON Surge control vessel</p>
S01(B-)	<p><b>Description: Saponification 250 Line Process</b></p> <p><u>Maximum Processing Rate</u>: 41,485 lb/hr</p> <p><u>Construction Date</u>: 1959</p>
B1	250 Line Paste Mixer, GD-5251 A/B
B2	250 Line Belt Saponifier, DC-5251
B3	250 Line Primary Crushing Mill (#1 PCM), PA-5251
B4	250 Line Slurry Grinder (#2 PCM), PA-5252
B5	<p>250 Line Slurry Tank, FA-5251</p> <p><u>Capacity</u>: 1,940 gallons</p> <p><u>Maximum True Vapor Pressure</u>: &gt; 1 psia</p> <p>MON Surge control vessel</p>
B6	250 Line Centrifuge, JB-5251
B7	<p>250 Line Filtrate Tank, FA-5254</p> <p><u>Capacity</u>: 650 gallons</p> <p><u>Maximum True Vapor Pressure</u>: &gt; 1 psia</p> <p>MON Surge control vessel</p>



## SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

EP	Emission Point Description
<b>S01(C-)</b>	<b>Description: Saponification 400 Line Process</b> <u>Maximum Processing Rate:</u> 41,485 lb/hr <u>Construction Date:</u> 1973
C1	400 Line Paste Mixer, GD-5401 A/B
C2	400 Line Belt Saponifier, DC-5401
C3	400 Line Primary Crushing Mill (#1 Polymer Cutting Machine (PCM)), PA-5401
C4	400 Line Slurry Grinder (#2 PCM), PA-5402
C5	400 Line Slurry Tank, FA-5401 <u>Capacity:</u> 1,940 gallons <u>Maximum True Vapor Pressure:</u> > 1 psia MON Surge control vessel
C6	400 Line Centrifuge, JB-5401
C7	400 Line Filtrate Tank, FA-5404 <u>Capacity:</u> 630 gallons <u>Maximum True Vapor Pressure:</u> > 1 psia MON Surge control vessel
<b>S01(D-)</b>	<b>Description: Saponification 600 Line Process</b> <u>Maximum Processing Rate:</u> 55,300 lb/hr <u>Construction Date:</u> 1984
D1	600 Line Paste Mixer, GD-5601 A/B
D2	600 Line Belt Saponifier, DC-5601
D3	600 Line Primary Crushing Mill (#1 PCM), PA-5601
D4	600 Line Slurry Grinder (#2 PCM), PA-5602
D5	600 Line Slurry Tank, FA-5601 <u>Capacity:</u> 1,940 gallons <u>Maximum True Vapor Pressure:</u> > 1 psia MON Surge control vessel
D6	600 Line Centrifuge, JB-5601
D7	600 Line Filtrate Tank, FA-5604 <u>Capacity:</u> 1,170 gallons <u>Maximum True Vapor Pressure:</u> > 1 psia MON Surge control vessel
<b>S01(--)</b>	<b>Saponification Process Tanks</b> <u>Tank Description:</u> Fixed Roof Tanks <u>Construction Date:</u> 1959 MON Group 2 Storage Tanks
E1	Chilled Methanol Return Tank, FA-5203 <u>Capacity:</u> 250 gallons, storing methanol <u>Maximum True Vapor Pressure:</u> < 1 psia
F1	Sodium Hydroxide Feed Tank, FA-5211 <u>Capacity:</u> 4,210 gallons, storing a solution of 10 weight percent sodium hydroxide <u>Maximum True Vapor Pressure:</u> > 1 psia
G1	Mixer Flush Tank, FA-5216 <u>Capacity:</u> 2,200 gallons, storing polyvinyl acetate and polyvinyl alcohol in methanol <u>Maximum True Vapor Pressure:</u> > 1 psia
H1	SAP Catalyst Make-up Tank, FA-5261 <u>Capacity:</u> 4,260 gallons, storing a solution of 10 weight percent sodium hydroxide <u>Maximum True Vapor Pressure:</u> > 1 psia

## SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

EP	Emission Point Description
S02(--)	<b>Description: Saponification Process Unit Drying</b> <u>Control Device:</u> Countercurrent packed bed scrubber, identified as Main Vent Scrubber, DA-5605 <u>Scrubbing Liquid:</u> Water, methanol and methyl acetate <u>Scrubbing Liquid Flow Rate:</u> 50 gal/min on or before the compliance date in 40 CFR 63.2445(b) for compliance with 40 CFR 63, Subpart FFFF; 25 gal/min prior to compliance with Subpart FFFF <u>Control Efficiency:</u> 99% for Methyl Alcohol, 82% for Methyl Acetate on or before the compliance date in 40 CFR 63.2445(b) for compliance with 40 CFR 63, Subpart FFFF; 66% for Methyl Acetate prior to compliance with Subpart FFFF <u>Construction Date:</u> 1987 Main Vent Scrubber, DA-5605, is a MON Recovery device and a MON Group 2 Process Vent
S02(A-)	<b>Description: Saponification 200 Line Drying</b> <u>Maximum Processing Rate:</u> 41,485 lb/hr
A1	200 Line Turbo Dryer, PA-5202 <u>Construction Date:</u> 1982
A2	200 Line Post Dryer, DA-5206 <u>Construction Date:</u> 1994
A3	200 Line Cyclone Collector, FC-5201 <u>Construction Date:</u> 1994
A4	200 Line Scrub Tower, DA-5201 <u>Construction Date:</u> 1959
A5	200 Line Dryer Condensate Tank, FA-5202 <u>Capacity:</u> 1,150 gallons <u>Construction Date:</u> 1959 <u>Maximum True Vapor Pressure:</u> > 1 psia MON Surge control vessel
S02(B-)	<b>Description: Saponification 250 Line Drying</b> <u>Maximum Processing Rate:</u> 41,485 lb/hr
B1	250 Line Turbo Dryer, PA-5255 <u>Construction Date:</u> 1982
B2	250 Line Post Dryer, DA-5256 <u>Construction Date:</u> 1994
B3	250 Line Cyclone Collector, FC-5251 <u>Construction Date:</u> 1994
B4	250 Line Scrub Tower, DA-5251 <u>Construction Date:</u> 1959
B5	250 Line Dryer Condensate Tank, FA-5252 <u>Capacity:</u> 1,350 gallons <u>Construction Date:</u> 1959 <u>Maximum True Vapor Pressure:</u> > 1 psia MON Surge control vessel
S02(C-)	<b>Description: Saponification 400 Line Drying</b> <u>Maximum Processing Rate:</u> 41,485 lb/hr
C1	400 Line Turbo Dryer, PA-5405 <u>Construction Date:</u> 1982
C2	400 Line Post Dryer, DA-5403 <u>Construction Date:</u> 1991
C3	400 Line Cyclone Collector, FC-5401 <u>Construction Date:</u> 1991
C4	400 Line Scrub Tower, DA-5401 <u>Construction Date:</u> 1973

## SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

EP	Emission Point Description
C5	400 Line Dryer Condensate Tank, FA-5402 <u>Capacity</u> : 810 gallons <u>Construction Date</u> : 1973 <u>Maximum True Vapor Pressure</u> : > 1 psia MON Surge control vessel
<b>S02(D-)</b>	<b>Description: Saponification 600 Line Drying</b> <u>Maximum Processing Rate</u> : 55,300 lb/hr
D1	600 Line Turbo Dryer, PA-5605 <u>Construction Date</u> : 1984
D2	600 Line Post Dryer, DA-5606 <u>Construction Date</u> : 1994
D3	600 Line Cyclone Collector, FC-5601 <u>Construction Date</u> : 1994
D4	600 Line Scrub Tower, DA-5603 <u>Construction Date</u> : 1984
D5	600 Line Dryer Condensate Tank, FA-5602 <u>Capacity</u> : 2,750 gallons <u>Construction Date</u> : 1984 <u>Maximum True Vapor Pressure</u> : > 1 psia MON Surge control vessel
<b>S03</b>	<b>200 Line Turbo Dryer Startups</b> , PA-5202
<b>S04</b>	<b>200 Line Product Transfer Collector</b> , FD-5216 <u>Description</u> : Pneumatically transfers dried polyvinyl alcohol solids from Post Dryer to the Pre-Grinded Product Silos <u>Construction Date</u> : 1994 <u>Control Device</u> : Baghouse, 99.6% control efficiency for PM <u>Construction Date</u> : 1988
<b>S05</b>	<b>200 Line Boilout Emissions</b> Boilout from Paste Mixer is a MON Group 2 Wastewater Stream Boilout from the Saponifier and Slurry Tank, Centrifuge and Filtrate Tank, Turbo Dryer, and Post Dryer are MON Maintenance Wastewater Streams
<b>S06</b>	<b>200/250 Saponification Lines Spot Vent Blower</b> , GB-5215 <u>Description</u> : Captures 200/250 Line fugitive emissions <u>Construction Date</u> : 1978
<b>S07</b>	<b>250 Line Turbo Dryer Startups</b> , PA-5255
<b>S08</b>	<b>250 Line Product Transfer Collector</b> , FD-5266 <u>Description</u> : Pneumatically transfers dried polyvinyl alcohol solids from Post Dryer to the Pre-Grinded Product Silos <u>Construction Date</u> : 1994 <u>Control Device</u> : Baghouse, 99.6% control efficiency for PM <u>Construction Date</u> : 1988
<b>S09</b>	<b>250 Line Boilout Emissions</b> Boilout from Paste Mixer is a MON Group 2 Wastewater Stream Boilout from the Saponifier and Slurry Tank, Centrifuge and Filtrate Tank, Turbo Dryer, and Post Dryer are MON Maintenance Wastewater Streams
<b>S10</b>	<b>400 Line Spot Vent Blower</b> , GB-5429 <u>Description</u> : Captures 400 Line fugitive emissions <u>Construction Date</u> : 1978
<b>S11</b>	<b>400 Line Turbo Dryer Startups</b> , PA-5405

## SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

EP	Emission Point Description
<b>S12</b>	<b>400 Line Product Transfer Collector</b> , FD-5416 <u>Description</u> : Pneumatically transfers dried polyvinyl alcohol solids from Post Dryer to the Pre-Grinded Product Silos <u>Construction Date</u> : 1991 <u>Control Device</u> : Baghouse, 99.6% control efficiency for PM <u>Construction Date</u> : 1985
<b>S13</b>	<b>400 Line Boilout Emissions</b> Boilout from Paste Mixer is a MON Group 2 Wastewater Stream Boilout from the Saponifier and Slurry Tank, Centrifuge and Filtrate Tank, Turbo Dryer, and Post Dryer are MON Maintenance Wastewater Streams
<b>S14</b>	<b>600 Line Spot Vent</b> , GB-5602 <u>Description</u> : Captures 600 Line fugitive emissions <u>Construction Date</u> : 1978
<b>S15</b>	<b>600 Line Turbo Dryer Startups</b> , PA-5605
<b>S16</b>	<b>600 Line Product Transfer Collector</b> , PA-5606 <u>Description</u> : Pneumatically transfers dried polyvinyl alcohol solids from Post Dryer to the Pre-Grinded Product Silos <u>Construction Date</u> : 1994 <u>Control Device</u> : Baghouse, 99.6% control efficiency for PM <u>Construction Date</u> : 1985
<b>S17</b>	<b>600 Line Boilout Emissions</b> Boilout from Paste Mixer is a MON Group 2 Wastewater Stream Boilout from the Saponifier and Slurry Tank, Centrifuge and Filtrate Tank, Turbo Dryer, and Post Dryer are MON Maintenance Wastewater Streams
<b>S18</b>	<b>SAP Acid Tank</b> , FA-5215, storing Acetic Acid <u>Capacity</u> : 185 gallons <u>Construction Date</u> : 1959 MON Group 2 Storage Tank
<b>S19</b>	<b>Saponification Process Unit Fugitives</b> (Approximately 95 Pumps/Agitators, 60 Pressure Relief Valves, 2,002 Valves and 8,482 Connectors)

### **APPLICABLE REGULATIONS:**

This source has elected to accept annual limits in order to preclude the applicability of 401 KAR 51:017, *Prevention of Significant Deterioration of Air Quality* (PSD) for volatile organic compounds and particulate matter.

401 KAR 59:010, *New Process Operations*, applies to each affected facility not subject to another emission standard for particulate matter (PM) in Chapter 59 of 401 KAR commenced on or after July 2, 1975. This rule applies to EP S04, S08, S12 and S16.

401 KAR 63:002, Sections 2 and 3(1)(d), which incorporates by reference 40 CFR 63 Subpart F, *National Emission Standards for Organic Hazardous Air Pollutants From the Synthetic Organic Chemical Manufacturing Industry*, is applicable pursuant to 40 CFR 63, Subpart FFFF, and applies to maintenance wastewater and liquid streams in an open system within a Miscellaneous Organic Chemical Manufacturing Process Unit (MCPU).

401 KAR 63:002, Sections 2 and 3(1)(e), which incorporates by reference 40 CFR 63 Subpart G, *National Emission Standards for Organic Hazardous Air Pollutants from the Synthetic Organic Chemical Manufacturing Industry for Process Vents, Storage Vessels, Transfer Operations, and Wastewater*, is applicable pursuant to 40 CFR 63, Subpart FFFF, and applies to the process wastewater streams.

**SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

- 401 KAR 63:002, Sections 2 and 3(1)(f), which incorporates by reference 40 CFR 63 Subpart H, *National Emission Standards for Organic Hazardous Air Pollutants for Equipment Leaks*, is applicable pursuant to 40 CFR 63, Subpart FFFF, and applies to the equipment leaks.
- 401 KAR 63:002, Sections 2 and 3(1)(kk), which incorporates by reference 40 CFR 63 Subpart SS, *National Emission Standards for Closed Vent Systems, Control Devices, Recovery Devices and Routing to a Fuel Gas System or a Process*, is applicable pursuant to 40 CFR 63, Subpart FFFF, and applies to the closed vent systems.
- 401 KAR 63:002, Sections 2 and 3(1)(mmm), which incorporates by reference 40 CFR 63 Subpart FFFF, *National Emission Standards for Hazardous Air Pollutants: Miscellaneous Organic Chemical Manufacturing*, applies to the Polymerization, Saponification, and Polyrectification Areas, as these areas produce polyvinyl alcohol, listed under Table 1 of 40 CFR 63 Subpart B, *Requirements for Control Technology Determinations for Major Sources in Accordance with Clean Air Act Sections, Sections 112(g) and 112(j)*, as a MON Source Category. 40 CFR 63.2455 applies to EP S01 and S02, each as a Group 2 continuous process vent pursuant to 40 CFR 63.2455(c). 40 CFR 63.2470 applies to the Group 2 storage tanks at EP S01(E1)-S01(H1) and S18. 40 CFR 63.2480 applies to the equipment leaks. 40 CFR 63.2485 applies to the wastewater streams from EP S05, S09, S13 and S17.
- 401 KAR 63:020, *Potentially Hazardous Matter or Toxic Substances*, applies to sources which emit or may emit potentially hazardous or toxic substances.

**NON-APPLICABLE REGULATIONS:**

- 401 KAR 60:005, Sections 2 and 3(1)(q), which incorporates by reference 40 CFR 60, Subpart Kb (40 CFR 60.112b), *Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced after July 23, 1984*, does not apply to the storage tanks at EP S01(D5), S01(D7) and S02(D5) because the storage capacity of each tank is less than the rule applicability threshold of 75 m<sup>3</sup> (19,812 gallons).
- 40 CFR 60, Subpart VV (40 CFR 60.480), *Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry*, is not applicable to the Saponification Area units, as these units do not produce any of the chemicals listed in 40 CFR 60.489.
- 40 CFR 60, Subpart RRR, *Standards of Performance for Volatile Organic Compound Emissions from Synthetic Organic Chemical Manufacturing Industry (SOCMI) Reactor Processes*, is not applicable to the Saponification Area units, as these units do not produce chemicals listed under §60.707.
- 401 KAR 63:002, Sections 2 and 3(1)(d), which incorporates by reference 40 CFR 63 Subpart F, *National Emission Standards for Organic Hazardous Air Pollutants from the Synthetic Organic Chemical Manufacturing Industry*, and related Subparts G and H, are not applicable to the Saponification Area units, as these do not produce chemicals listed under Table 1 of 40 CFR 63, Subpart F as a primary product. This determination notwithstanding, specific provisions of Subpart F, G and H are included in this section since they are incorporated by reference in 40 CFR 63 Subpart FFFF.
- 401 KAR 63:002, Sections 2 and 3(1)(III), which incorporates by reference 40 CFR 63 Subpart EEEE, *National Emission Standards for Hazardous Air Pollutants: Organic Liquids Distribution (Non-Gasoline)*, does not apply to the organic liquid distribution of methanol and

**SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

vinyl acetate, listed under Table 1 of 40 CFR 63 Subpart EEEE, in the Saponification Area, because these operations are subject to 40 CFR 63, Subpart FFFF.

Pursuant to the definition of *Storage tank* and *Surge control vessel* in 40 CFR 63.2550, surge control vessels are excluded from the definition of a storage tank. Therefore, the SAP Slurry Tanks (EP S01(A5), S01(B5), S01(C5) and S01(D5)), the SAP Filtrate Tanks (EP S01(A7), S01(B7), S01(C7) and S01(D7)) and the Dryer Condensate Tanks (S02(A5), S02(B5), S02(C5) and S02(D5)) are exempt from 40 CFR 63 Subpart FFFF.

**State-Origin Applicable Regulations:**

Permit No. S-95-198R, issued on June 4, 1998, Permit No. S-97-054, issued on May 20, 1997, Permit No. O-87-015, issued on March 27, 1987, Permit No. C-86-172, issued on August 8, 1986, and Permit No. C-84-146, issued on August 21, 1984. See **Section B, Group Requirements**.

**1. Operating Limitations:**

- a. Refer to **Section B, Group Requirements**.
- b. The particulate control devices shall be in operation at all times the Product Transfer Collectors at EP S04, S08 and S12 are operating.
- c. The provisions of 40 CFR Part 63, Subpart A - General Provisions, which are incorporated by reference in 401 KAR 63:002 Section 3(a), apply to the equipment listed in this section that is subject to Subpart FFFF. Table 12 to Subpart FFFF of Part 63 specifies the provisions of Subpart A that apply and those that do not apply. [40 CFR Part 63.2540]

**Process Vents**

- d.
  - (i) Pursuant to 40 CFR 63.982(e), as incorporated by reference in 40 CFR 63.2455(c), for the Group 2 continuous process vents at EP S01 and S02, each using a recovery device to maintain the TRE above 5.0, the recovery devices, including the 600 SAP Vent Scrubber and the Main Vent Scrubber, shall be operated at all times when emissions are vented to them. [40 CFR 63.993(a)(2)]
  - (ii) Also see **7. Specific Control Equipment Operating Conditions**.

**Maintenance Wastewater Streams**

- e. Pursuant to 40 CFR 63.2485(a) and Table 7 to Subpart FFFF, for maintenance wastewaters from Boilout of the Saponifiers and Slurry Tanks, Centrifuges and Filtrate Tanks, Turbo Dryers, and Post Dryers in the SAP Area containing organic HAPs listed in Tables 8 and 9 of 40 CFR 63 Subpart FFFF, the permittee shall properly manage the wastewater and control organic HAP emissions. [40 CFR 63.105(a)]

**Process Wastewater Streams**

- f. Pursuant to 40 CFR 63.2485(a) and (b), and Table 7 to Subpart FFFF, the permittee shall not discard liquid or solid organic materials with a concentration of greater than 10,000 parts per million of compounds listed in Tables 8 and 9 of 40 CFR 63 Subpart FFFF (as determined by analysis of the stream composition,

**SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

engineering calculations, or process knowledge, according to the provisions of 40 CFR 63.144(b)) from a chemical manufacturing process unit to water or wastewater, unless the receiving stream is managed and treated as a Group 1 wastewater stream. This prohibition does not apply to materials from the following activities: [40 CFR 63.132(f)]

- (i) Equipment leaks;
- (ii) Activities included in maintenance or startup/shutdown/malfunction plans;
- (iii) Spills; or
- (iv) Samples of a size not greater than reasonably necessary for the method of analysis that is used.

Liquid Streams in Open Systems

- g. Pursuant to 40 CFR 63.149 and Table 35 to Subpart G, as incorporated by reference in 40 CFR 63.2485(a) and Table 7 to Subpart FFFF, for the Saponifier enclosure manway hatches, at EP S01(A2), S01(B2), S01(C2) and S01(D2), the permittee shall maintain tight-fitting solid covers (TFSC) with no visible gaps or openings, except during periods of sampling, inspection, or maintenance. [40 CFR 63.149(a)]

Pipeline Equipment

- h. Pursuant to 40 CFR 63.2480(a) and Table 6 to Subpart FFFF, for the pipeline equipment in organic hazardous air pollutant service, the permittee shall implement a leak detection and repair (LDAR) program in accordance with 40 CFR 63, Subpart H containing the following elements:
  - (i) Each piece of pipeline equipment subject to 40 CFR 63 Subpart FFFF shall be identified such that it can be distinguished readily from equipment that is not subject to 40 CFR 63 Subpart H [40 CFR 63.162(c)].
  - (ii) When a leak is detected as specified in 40 CFR 63.163 and 63.164; 63.168 and 63.169; and 63.172 through 63.174, the permittee shall: [40 CFR 63.162(f)]
    - (1) Clearly identify the leaking equipment.
    - (2) The identification on a valve may be removed after it has been monitored as specified in 40 CFR 63.168(f)(3) and 63.175(e)(7)(i)(D), and no leak has been detected during the follow-up monitoring. If the permittee elects to comply using the provisions of 40 CFR 63.174(c)(1)(i), the identification on a connector may be removed after it is monitored and no leak is detected during that monitoring.
    - (3) The identification which has been placed on equipment determined to have a leak, except for a valve or for a connector that is subject to 40 CFR 63.174(c)(1)(i), may be removed after it is repaired.
  - (iii) Specific standards for each type of pipeline equipment described under 2.

**Emission Limitations.**

**Compliance Demonstration Method:**

- a. Refer to **Section B, Group Requirements.**

**SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

- b. Refer to **4. Specific Monitoring Requirements** for Process Vents and Maintenance Wastewater Streams.

Process Wastewater Streams

- c. Total annual average concentration shall be determined according to the procedures specified in 40 CFR 63.144(b). Annual average flow rate shall be determined according to the procedures specified in 40 CFR 63.144(c). [40 CFR 63.132(c)]
- d. For a Group 2 wastewater, the permittee shall re-determine group status for each Group 2 stream, as necessary, to determine whether the stream is Group 1 or Group 2 whenever process changes are made that could reasonably be expected to change the stream to a Group 1 stream. Examples of process changes include, but are not limited to, changes in production capacity, production rate, feedstock type, or whenever there is a replacement, removal, or addition of recovery or control equipment. For purposes of this paragraph, process changes do not include: Process upsets; unintentional, temporary process changes; and changes that are within the range on which the original determination was based. [40 CFR 63.132(c)(3)]
- e. Also refer to **4. Specific Monitoring Requirements**.

Liquid Streams in Open Systems

- f. Compliance shall be determined by inspection.

Pipeline Equipment

- g. Compliance shall be determined by review of the records required by 40 CFR 63.181 and the reports required by 40 CFR 63.182, review of performance test results, and by inspections. [40 CFR 63.162(a)]

**2. Emission Limitations:**

- a. Refer to **Section B, Group Requirements**.
- b. Pursuant to 401 KAR 59:010, Section 3(2), emissions of particulate matter (PM) shall not exceed 7.09 lb/hr from each Product Transfer Collector at EP S04, S08 and S12; and 8.48 lb/hr from the Product Transfer Collector at EP S16.
- c. Pursuant to 401 KAR 59:010, Section 3(1), emissions shall not equal or exceed 20% opacity from each Product Transfer Collector at EP S04, S08, S12 and S16.
- d. Pursuant to 401 KAR 63:020, no owner or operator shall allow any affected facility to emit potentially hazardous matter or toxic substances in such quantities or duration as to be harmful to the health and welfare of humans, animals and plants.

Pipeline Equipment

- e. Pursuant to 40 CFR 63.2480(a) and Table 6 to Subpart FFFF, the permittee shall comply with the fugitive emissions standards of 40 CFR 63, Subpart H, as applicable. See below for detailed standards for different services:
- (i) Standards: Pumps in light liquid service [40 CFR 63.163]:  
40 CFR 63.163(a): Implementation and compliance provisions



**SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

- 40 CFR 63.163(b): Monitoring requirements, leak detection levels, frequency of monitoring
- 40 CFR 63.163(c): Repair procedures and time frames
- 40 CFR 63.163(d): Procedures to determine percent leaking pumps and quality improvement program requirements
- 40 CFR 63.163(e)-(j): Exemptions for specific types of pumps
- (ii) Standards: Compressors [40 CFR 63.164]
  - 40 CFR 63.164(a)-(e): Operational requirements
  - 40 CFR 63.164(f): Criteria for leak detection
  - 40 CFR 63.164(g): Repair procedures and time frames
  - 40 CFR 63.164(h)-(i): Exemptions for specific types of compressors
- (iii) Standards: Pressure relief devices in gas/vapor service [40 CFR 63.165]:
  - 40 CFR 63.165(a): Operational requirements
  - 40 CFR 63.165(b): Pressure release procedures
  - 40 CFR 63.165(c)-(d): Exemptions for specific types of pressure relief devices
- (iv) Standards: Sampling Connection Systems [40 CFR 63.166]:
  - 40 CFR 63.166(a)-(b): Operational requirements
  - 40 CFR 63.166(c): Exemptions for specific types of sampling connection systems
- (v) Standards: Open-ended valves or lines [40 CFR 63.167]:
  - 40 CFR 63.167(a)-(c): Operational requirements
  - 40 CFR 63.167(d)-(e): Exemptions for specific types of valves
- (vi) Standards: Valves in gas/vapor service and in light liquid service [40 CFR 63.168]:
  - 40 CFR 63.168(a): Operational requirements
  - 40 CFR 63.168(b)-(d): Monitoring requirements and intervals
  - 40 CFR 63.168(e): Procedures to determine percent leaking valves
  - 40 CFR 63.168(f): Leak repair time frames
  - 40 CFR 63.168(g): First attempt repair procedures
  - 40 CFR 63.168(h): Exemptions for unsafe-to-monitor valves
  - 40 CFR 63.168(i): Exemptions for difficult-to-monitor valves
- (vii) Standards: Instrumentation systems [40 CFR 63.169]:
  - 40 CFR 63.169(a): Monitoring frequency
  - 40 CFR 63.169(b): Leak detection levels
  - 40 CFR 63.169(c): Leak repair time frames
- (viii) Standards: Delay of repair [40 CFR 63.171]:
  - 40 CFR 63.171 Allowances for delay of repair
- (ix) Standards: Closed-vent systems and control devices [40 CFR 63.172]:
  - 40 CFR 63.172(a)-(b): Operational requirements
  - 40 CFR 63.172(d),(m): Control device requirements
  - 40 CFR 63.172(f)-(g): Monitoring requirements
  - 40 CFR 63.172(h)-(i): Repair procedures and time frames
  - 40 CFR 63.172(j): Operational requirements for bypass lines
  - 40 CFR 63.172(k)-(l): Exemptions for unsafe-to-inspect and difficult-to-inspect closed-vent systems

**SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

- (x) Standards: Agitators in gas/vapor service and in light liquid service [40 CFR 63.173]:
  - 40 CFR 63.173(a): Operational requirements
  - 40 CFR 63.173(b): Monitoring requirements and intervals
  - 40 CFR 63.173(c): Leak repair time frames
  - 40 CFR 63.173(d)-(g): Exemptions for specific types of agitators
  - 40 CFR 63.173(h)-(j): Exemptions for difficult-to-monitor, inaccessible or unsafe-to-monitor agitators
- (xi) Standards: connectors in gas/vapor service and in light liquid service.  
Pursuant to 40 CFR 63.2480(b)(4), the permittee may elect to comply with the standards in 40 CFR 63.174 or the standards in 40 CFR 63.169 for connectors in heavy liquid service:
  - 40 CFR 63.169(a) Monitoring frequency
  - 40 CFR 63.169(b) Leak detection levels
  - 40 CFR 63.169(c) Leak repair time frames
  - 40 CFR 63.174(a): Operational requirements
  - 40 CFR 63.174(b): Monitoring requirements and intervals
  - 40 CFR 63.174(c): Procedures for open connectors or connectors with broken seals
  - 40 CFR 63.174(d): Leak repair time frames
  - 40 CFR 63.174(e): Monitoring frequency for repaired connectors
  - 40 CFR 63.174(f)-(h): Exemptions for unsafe-to-monitor, unsafe-to-repair, inaccessible, or ceramic connectors
  - 40 CFR 63.174(i): Procedures to determine percent leaking connectors
  - 40 CFR 63.174(j): Optional credit for removed connectors
- (xii) Quality improvement program for valves [40 CFR 63.175]: Pursuant to 40 CFR 63.168(d)(1)(ii), in Phase III, the permittee may elect to implement the following quality improvement programs if the percent of leaking valves is equal to or exceeds 2 percent:
  - 40 CFR 63.175(a): Quality improvement program alternatives
  - 40 CFR 63.175(b): Criteria for ending quality improvement programs
  - 40 CFR 63.175(c): Alternatives following achievement of less than 2 percent leaking valves target
  - 40 CFR 63.175(d): Quality improvement program to demonstrate further progress
  - 40 CFR 63.175(e): Quality improvement program of technology review and improvement
- (xiii) Quality improvement program for pumps [40 CFR 63.176]: Pursuant to 40 CFR 63.163(d)(2), if, in Phase III, calculated on a 6-month rolling average, the greater of either 10 percent of the pumps or three pumps in the Polymerization, Saponification, or Polyrectification Areas leak, the permittee shall implement the following quality improvement programs for pumps:
  - 40 CFR 63.176(a): Applicability criteria

**SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

- 40 CFR 63.176(b): Criteria for ending the quality improvement program
- 40 CFR 63.176(c): Criteria for resumption of the quality improvement program
- 40 CFR 63.176(d): Quality improvement program elements
- (xiv) The requirements for pressure testing in 40 CFR 63.178(b) may be applied to all processes, not just batch processes. The permittee may elect to use pressure testing of equipment to demonstrate compliance by meeting the following requirements of 40 CFR 63.178(b). Compliance with the provisions of 40 CFR 63.178(b) exempts the permittee from the monitoring provisions of 40 CFR 63.163, 63.168 and 63.169, and 63.173 through 63.176. [40 CFR 63.2480(b)(1) and 63.178(b)]
- (1) The permittee may switch among the alternatives provided the change is documented as specified in 40 CFR 63.181.[40 CFR 63.178(a)]
- (2) For the purposes of 40 CFR 63 Subpart FFFF, pressure testing for leaks in accordance with 63.178(b) is not required after reconfiguration of an equipment train if flexible hose connections are the only disturbed equipment.

**Compliance Demonstration Method:**

- a. Refer to **Section B, Group Requirements**.
- b. To provide reasonable assurance that the particulate matter emission limitations of 401 KAR 59:010 are being met, the permittee shall monitor the amount of process weight added to each emissions unit. The process weight rate shall be determined by dividing the tons of material added to each emission unit in a calendar month by the total hours the unit operated that month. Average particulate (PM) emissions shall be calculated as follows:

$$\text{Controlled PM Emissions} = \text{PR} \times \text{EF} \times (1 - \text{CE}/100)$$

Where: PR = PVOH Production Rate for the emission point (tons/hr)  
EF = Emission Factor (lb PM / ton PVOH produced)  
CE = Control Efficiency (%)

- c. For compliance with the opacity limit, refer to **4. Specific Monitoring Requirements**.
- d. If a Product Transfer Collector at EP S04, S08, S12 or S16 is in operation during any period of malfunction of the particulate control device, the permittee shall shut down the affected emission unit until associated repairs are complete and take the necessary corrective actions in accordance with **5.d. Specific Recordkeeping Requirements**.
- e. For compliance with 401 KAR 63:020, if the source alters process rates, material formulations, or any other factor that would result in an increase of HAP emissions or the addition of HAP emissions not previously evaluated by the Division, the source shall submit the appropriate application forms pursuant to

**SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

401 KAR 52:020, along with air modeling to show that the facility will remain in compliance with 401 KAR 63:020. The source may perform a screening analysis of the potential to emit of methanol, methyl acetate, and any other toxic pollutant emissions at the plant and compare it to established benchmarks (i.e. Reference Concentrations (RfCs), Unit Risk Estimates (UREs), as applicable).

Pipeline Equipment

- f. Compliance shall be determined by review of the records required by 40 CFR 63.181 and by inspections. [40 CFR 63.162(a)]

**3. Testing Requirements:**Pipeline Equipment

The permittee shall comply with the following test methods and procedures requirements pursuant to 40 CFR 63.180(a):

- a. Monitoring shall comply with Method 21 of 40 CFR part 60, appendix A. [40 CFR 63.180(b)(1)]
- b. The detection instrument shall meet the performance criteria of Method 21 of 40 CFR part 60, appendix A, except the instrument response factor criteria in Section 3.1.2(a) of Method 21 shall be for the average composition of the process fluid not each individual VOC in the stream. For process streams that contain nitrogen, water, air, or other inerts which are not organic HAPs or VOCs, the average stream response factor may be calculated on an inert-free basis. The response factor may be determined at any concentration for which monitoring for leaks will be conducted. If no instrument is available at the plant site that will meet the performance criteria, the instrument readings may be adjusted by multiplying by the average response factor of the process fluid, calculated on an inert-free basis. [40 CFR 63.180(b)(2)]
- c. The instrument shall be calibrated before use on each day of its use by the procedures specified in Method 21 of 40 CFR part 60, appendix A. [40 CFR 63.180(b)(3)]
- d. Calibration gases shall be: [40 CFR 63.180(b)(4)]
  - (i) Zero air (less than 10 parts per million of hydrocarbon in air); and
  - (ii) Mixtures of methane in air at the concentrations specified in paragraphs 63.180(b)(4)(ii)(A) through (b)(4)(ii)(C). A calibration gas other than methane in air may be used if the instrument does not respond to methane or if the instrument does not meet the performance criteria specified in 40 CFR 63.180(b)(2)(i). In such cases, the calibration gas may be a mixture of one or more of the compounds to be measured in air.
  - (iii) The instrument may be calibrated at a higher methane concentration than the concentration specified for that piece of equipment. The concentration of the calibration gas may exceed the concentration specified as a leak by no more than 2,000 parts per million. If the monitoring instrument's design allows for multiple calibration scales, then the lower scale shall be calibrated with a calibration gas that is no higher than 2,000 parts per million above the concentration specified as a leak and the highest scale shall be calibrated with a calibration gas that is approximately equal to

**SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

- 10,000 parts per million. If only one scale on an instrument will be used during monitoring, the permittee need not calibrate the scales that will not be used during that day's monitoring.
- e. Monitoring shall be performed when the equipment is in organic HAP service, in use with an acceptable surrogate volatile organic compound which is not an organic HAP, or is in use with any other detectable gas or vapor. [40 CFR 63.180(b)(5)]
  - f. Monitoring data that do not meet the criteria specified in 40 CFR 63.180(b)(1) through (b)(5) may be used to qualify for less frequent monitoring under the provisions in 40 CFR 63.168(d)(2) and (d)(3) or 63.174(b)(3)(ii) or (b)(3)(iii) provided the data meet the following conditions. [40 CFR 63.180(b)(6)]
    - (i) The data were obtained before April 22, 1994.
    - (ii) The departures from the criteria specified in 40 CFR 63.180(b)(1) through (b)(5) or from the specified monitoring frequency of 40 CFR 63.168(c) are minor and do not significantly affect the quality of the data. Examples of minor departures are monitoring at a slightly different frequency (such as every six weeks instead of monthly or quarterly), following the performance criteria of section 3.1.2(a) of Method 21 of appendix A of 40 CFR part 60 instead of 40 CFR 63.180(b)(2), or monitoring at a different leak definition if the data would indicate the presence or absence of a leak at the concentration specified in this subpart. Failure to use a calibrated instrument is not considered a minor departure.
  - g. When equipment is monitored for compliance as required in 40 CFR 63.164(i), 63.165(a), and 63.172(f) or when equipment subject to a leak definition of 500 ppm is monitored for leaks as required by 40 CFR 63 Subpart H, the permittee may elect to adjust or not to adjust the instrument readings for background. If the permittee elects to not adjust instrument readings for background, the permittee shall monitor the equipment according to the procedures specified in 40 CFR 63.180(b)(1) through (b)(4). In such case, all instrument readings shall be compared directly to the applicable leak definition to determine whether there is a leak. If the permittee elects to adjust instrument readings for background, the permittee shall monitor the equipment according to the following procedures. [40 CFR 63.180(c)]
    - (i) The requirements of 40 CFR 63.180(b)(1) through (4) shall apply.
    - (ii) The background level shall be determined, using the same procedures that will be used to determine whether the equipment is leaking.
    - (iii) The instrument probe shall be traversed around all potential leak interfaces as close to the interface as possible as described in Method 21 of 40 CFR part 60, appendix A.
    - (iv) The arithmetic difference between the maximum concentration indicated by the instrument and the background level is compared with 500 parts per million for determining compliance.
  - h. (i) Each piece of equipment within a process unit that can reasonably be expected to contain equipment in organic HAP service is presumed to be in organic HAP service unless the permittee demonstrates that the piece of equipment is not in organic HAP service. For a piece of equipment to be

**SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

considered not in organic HAP service, it must be determined that the percent organic HAP content can be reasonably expected not to exceed 5 percent by weight on an annual average basis. For purposes of determining the percent organic HAP content of the process fluid that is contained in or contacts equipment, Method 18 of 40 CFR part 60, appendix A shall be used. [40 CFR 63.180(d)]

- (ii)
  - (1) The permittee may use good engineering judgment rather than the procedures in 40 CFR 63.180(d)(1) to determine that the percent organic HAP content does not exceed 5 percent by weight. When the permittee and the Division do not agree on whether a piece of equipment is not in organic HAP service, however, the procedures in 40 CFR 63.180(d)(1) shall be used to resolve the disagreement.
  - (2) Conversely, the permittee may determine that the organic HAP content of the process fluid does not exceed 5 percent by weight by, for example, accounting for 98 percent of the content and showing that organic HAP is less than 3 percent.
- (iii) If the permittee determines that a piece of equipment is in organic HAP service, the determination can be revised after following the procedures in 40 CFR 63.180(d)(1), or by documenting that a change in the process or raw materials no longer causes the equipment to be in organic HAP service.
- (iv) Samples used in determining the percent organic HAP content shall be representative of the process fluid that is contained in or contacts the equipment.

**4. Specific Monitoring Requirements:**

- a. Refer to **Section B, Group Requirements**.
- b. The permittee shall also perform the following monitoring:
  - (i) A qualitative visual observation of the opacity of emissions once each calendar week while operating each Product Transfer Collector at EP S04, S08, S12 and S16. If visible emissions are seen (not including condensed water vapor within the plume), the permittee shall perform an EPA Reference Method 9 test for opacity on the applicable stack emissions within 24 hours of observing visible emissions, and make any necessary repairs to bring the opacity into compliance.
  - (ii) The pressure drop across each dust collector once each calendar week.
  - (iii) The information specified in **5. Specific Recordkeeping Requirements**.
- c. Also refer to **7. Specific Control Equipment Operating Conditions**.

**Process Vents**

- d. The permittee shall install, calibrate, maintain, and operate according to manufacturer's specifications, the following:
  - (i) A device for the continuous measurement of the scrubbing liquid flow rate at the scrubbers at the scrubbers at EP S01 and S02.
  - (ii) A device for the continuous measurement of the temperature of the scrubbing liquid at the scrubbers at EP S01 and S02.

**SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

- e. Pursuant to 40 CFR 63.982(e), as incorporated by reference in 40 CFR 63.2455(c), for the Group 2 process vents at EP S01 and S02, if the TRE index value is >1.9 but less than or equal to 5.0, the permittee shall comply with the requirements specified in 40 CFR 63.2450(k)(5).

**Maintenance Wastewater**

- f. The permittee shall prepare a description of maintenance procedures for management of wastewaters generated from the emptying and purging of equipment in the process during temporary shutdowns for inspections, maintenance, and repair (i.e., a maintenance-turnaround) and during periods which are not shutdowns (i.e., routine maintenance). The descriptions shall include the following information: [40 CFR 63.105(b)]
  - (i) The process equipment or maintenance tasks that are anticipated to create wastewater during maintenance activities;
  - (ii) The procedures that will be followed to properly manage the wastewater and control organic HAP emissions to the atmosphere; and
  - (iii) The procedures to be followed when clearing materials from process equipment.
- g. The permittee shall modify and update the information required by 40 CFR 63.105(b) as needed following each maintenance procedure based on the actions taken and the wastewaters generated in the preceding maintenance procedure. [40 CFR 63.105(c)]
- h. The permittee shall incorporate the procedures described in 40 CFR 63.105(b) and (c) as part of the startup, shutdown, and malfunction plan required under 40 CFR 63.6(e)(3). [40 CFR 63.105(d)]
- i. Also see **5. Specific Recordkeeping Requirements** for Maintenance Wastewater.

**Pipeline Equipment**

- j. Refer to **3. Testing Requirements**.
- k. Fulfill all monitoring requirements per **2. Emission Limitations**.

**5. Specific Recordkeeping Requirements:**

- a. Refer to **Section B, Group Requirements**.
- b. The permittee shall maintain visual opacity observation records in accordance with **4.b Specific Monitoring Requirements**.
- c. The permittee shall maintain records of preventive maintenance and inspections of the particulate control devices and the scrubbers at EP S01 and S02 in accordance with **7. Specific Control Equipment Operating Conditions**.
- d. The permittee shall record the occurrence, duration, cause and any corrective action taken for each incident when a Product Transfer Collector at EP S04, S08, S12 or S16 is in operation but its respective particulate control device is not.
- e. The permittee shall maintain records of the pressure drop across the particulate control devices and the flow rate and temperature of the scrubbing liquid at the scrubbers at EP S01 and S02.
- f. All records shall be maintained in accordance with **Section F.2**.
- g. The permittee shall keep the following records: [40 CFR 63.2525]

**SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

- (i) Each applicable record required by 40 CFR 63 Subpart A and in referenced subparts F, G and SS of this part 63. [40 CFR 63.2525(a)]
- (ii) Records of each operating scenario as specified: [40 CFR 63.2525(b)]
  - (1) A description of the process and the type of process equipment used.
  - (2) An identification of related process vents, including their associated emissions episodes if not complying with the alternative standard in 40 CFR 63.2505; wastewater point of determination (POD); storage tanks; and transfer racks.
  - (3) The applicable control requirements of 40 CFR 63 Subpart FFFF, including the level of required control, and for vents, the level of control for each vent.
  - (4) The control device or treatment process used, as applicable, including a description of operating and/or testing conditions for any associated control device.
  - (5) The process vents, wastewater POD, transfer racks, and storage tanks (including those from other processes) that are simultaneously routed to the control device or treatment process(s).
  - (6) The applicable monitoring requirements of this subpart and any parametric level that assures compliance for all emissions routed to the control device or treatment process.
  - (7) Calculations and engineering analyses required to demonstrate compliance.
  - (8) For reporting purposes, a change to any of these elements not previously reported, except for 63.2525(b)(5), constitutes a new operating scenario.
- (iii) In the SSMP required by 40 CFR 63.6(e)(3), the permittee is not required to include Group 2 emission points, unless those emission points are used in an emissions average. For equipment leaks, the SSMP requirement is limited to control devices and is optional for other equipment. [40 CFR 63.2525(j)]

Process Vents

- h. Pursuant to 40 CFR 63.982(e), as incorporated by reference in 40 CFR 63.2455(c), for the Group 2 process vents at EP S01 and S02, TRE index value determination information shall be recorded as specified in 40 CFR 63.998(a)(3). [40 CFR 63.993(b)]

Storage Vessels

- i. For all Group 2 storage vessels, a record shall be kept for as long as the liquid is stored of the dimensions of the storage vessel, an analysis of the capacity of the storage vessel, and an identification of the liquid stored. [40 CFR 63.1065(a)]

Maintenance wastewater



**SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

- j. The permittee shall maintain a record of the information required by 40 CFR 63.105(b) and (c) as part of the start-up, shutdown, and malfunction plan required under 40 CFR 63.6(e)(3). [40 CFR 63.105(e)]

Wastewater Streams

- k. For the Group 2 wastewater streams, the permittee shall keep in a readily accessible location the following records. [40 CFR 63.147(b)(8)]
- (i) Process unit identification and description of the process unit.
  - (ii) Stream identification code.
  - (iii) The concentration of the compound(s) in Tables 8 and 9 of 40 CFR 63 Subpart FFFF, in parts per million, by weight, including documentation of the methodology used to determine concentration.
  - (iv) Flow rate in liter per minute.
  - (v) The documentation of how process knowledge was used to determine the annual average concentration and/or the annual average flow rate of the wastewater stream, if the permittee uses process knowledge to determine the annual average concentration of a wastewater stream and/or the annual average flow rate, and determines that the wastewater stream is not a Group 1 wastewater stream. [40 CFR 63.147(f)]
- l. Refer to **4. Specific Monitoring Requirements** for Wastewater Streams.

Pipeline Equipment

- m. The permittee may comply with the recordkeeping requirements for the equipment in the Polymerization, Saponification and Polyrectification Areas in one recordkeeping system if the system identifies each record by process unit and the program being implemented (e.g., quarterly monitoring, quality improvement) for each type of equipment. All records required by 40 CFR 63.181 shall be maintained in a manner that can be readily accessed at the plant site. [40 CFR 63.181(a)]
- n. The permittee shall maintain all records pertaining to the pipeline equipment required by 40 CFR 63.181(b).
- (i)
    - (1) A list of identification numbers for equipment (except instrumentation systems) subject to the requirements of this subpart. [40 CFR 63.181(b)(1)(i)]
    - (2) A schedule by process unit for monitoring connectors subject to 40 CFR 63.174(a) and valves subject to 40 CFR 63.168(d).
    - (3) Physical tagging of the equipment to indicate that it is in organic HAP service is not required. Equipment subject to the provisions of this subpart may be identified on a plant site plan, in log entries, or by other appropriate methods.
  - (ii)
    - (1) A list of identification numbers for equipment that the permittee elects to equip with a closed-vent system and control device, under the provisions of 40 CFR 63.163(g), 63.164(h), 63.165(c), or 63.173(f). [40 CFR 63.181(b)(2)(i)]
    - (2) A list of identification numbers for compressors that the permittee elects to designate as operating with an instrument reading of less

**SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

- than 500 parts per million above background, under the provisions of 40 CFR 63.164(i).
- (iii) A list of identification numbers for pressure relief devices subject to 40 CFR 63.165(a) and for pressure relief devices equipped with rupture disks, under the provisions of 40 CFR 63.165(d). [40 CFR 63.181(b)(3)]
  - (iv) Identification of instrumentation systems subject to 40 CFR 63 Subpart H. Individual components in an instrumentation system need not be identified.
  - (v) Identification of screwed connectors subject to 40 CFR 63.174(c)(2). Identification can be by area or grouping as long as the total number within each group or area is recorded.
  - (vi) The following information shall be recorded for each dual mechanical seal system:
    - (1) Design criteria required in 40 CFR 63.163(e)(6)(i), 63.164(e)(2), and 63.173(d)(6)(i) and an explanation of the design criteria; and
    - (2) Any changes to these criteria and the reasons for the changes.
  - (vii) The following information pertaining to all pumps subject to 40 CFR 63.163(j), valves subject to 40 CFR 63.168(h) and (i), agitators subject to 40 CFR 63.173(h) through (j), and connectors subject to 40 CFR 63.174(f) and (g) shall be recorded:
    - (1) Identification of equipment designated as unsafe to monitor, difficult to monitor, or unsafe to inspect and the plan for monitoring or inspecting this equipment.
    - (2) A list of identification numbers for the equipment that is designated as difficult to monitor, an explanation of why the equipment is difficult to monitor, and the planned schedule for monitoring this equipment.
    - (3) A list of identification numbers for connectors that are designated as unsafe to repair and an explanation why the connector is unsafe to repair.
  - (viii)
    - (1) A list of valves removed from and added to the process unit, as described in 40 CFR 63.168(e)(1), if the net credits for removed valves is expected to be used.
    - (2) A list of connectors removed from and added to the process unit, as described in 40 CFR 63.174(i)(1), and documentation of the integrity of the weld for any removed connectors, as required in 40 CFR 63.174(j). This is not required unless the net credits for removed connectors is expected to be used.
  - (ix) For any leaks detected as specified in 40 CFR 63.163 and 63.164; 63.168; and 63.172 through 63.174, a weatherproof and readily visible identification, marked with the equipment identification number, shall be attached to the leaking equipment.
- o. For visual inspections, the permittee shall document that the inspection was conducted and the date of the inspection. These records shall be kept for two years. [40 CFR 63.181(c)]

**SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

- p. When a leak is detected, the following information shall be recorded and kept for two years. [40 CFR 63.181(d)]
  - (i) The instrument and the equipment identification number and the operator name, initials, or identification number.
  - (ii) The date the leak was detected and the date of first attempt to repair the leak.
  - (iii) The date of successful repair of the leak.
  - (iv) Maximum instrument reading measured by Method 21 of 40 CFR part 60, appendix A after it is successfully repaired or determined to be nonrepairable.
  - (v) “Repair delayed” and the reason for the delay if a leak is not repaired within 15 calendar days after discovery of the leak.
    - (1) The permittee may develop a written procedure that identifies the conditions that justify a delay of repair. The written procedures may be included as part of the startup/shutdown/malfunction plan, required by 40 CFR 63.6(e)(3), for the source or may be part of a separate document that is maintained at the plant site. In such cases, reasons for delay of repair may be documented by citing the relevant sections of the written procedure.
    - (2) If delay of repair was caused by depletion of stocked parts, there must be documentation that the spare parts were sufficiently stocked on-site before depletion and the reason for depletion.
  - (vi) Dates of process unit shutdowns that occur while the equipment is unrepaired.
  - (vii)
    - (1) Identification, either by list, location (area or grouping), or tagging of connectors that have been opened or otherwise had the seal broken since the last monitoring period required in 40 CFR 63.174(b), as described in 40 CFR 63.174(c)(1), unless the permittee elects to comply with 63.174(c)(1)(ii).
    - (2) The date and results of monitoring as required in 40 CFR 63.174(c). If identification of connectors that have been opened or otherwise had the seal broken is made by location under 40 CFR 63.181(d)(7)(i), then all connectors within the designated location shall be monitored.
  - (viii) Copies of the periodic reports as specified in 40 CFR 63.182(d), if records are not maintained on a computerized database capable of generating summary reports from the records.
- q. If the permittee elects to comply with the pressure testing requirements in accordance with **2.e.(xiv) Emission Limitations**, the permittee is exempt from the requirements of paragraphs n, o, p and r of this section. Instead, the permittee shall maintain records as specified in 40 CFR 63.181(e).
- r. The results of compliance tests required for compressors and the dates and results of monitoring following a pressure relief valve pressure release shall be recorded. The results shall include: [40 CFR 63.181(f)]
  - (i) The background level measured during each compliance test.

**SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

- (ii) The maximum instrument reading measured at each piece of equipment during each compliance test.
- s. The permittee shall maintain records required for closed-vent systems and control devices subject to 40 CFR 63.172. [40 CFR 63.181 (g)]
  - (i) The design specifications and performance demonstrations specified in 40 CFR 63.181(g)(1)(i) through (g)(1)(iv) shall be retained for the life of the equipment.
    - (1) Detailed schematics, design specifications of the control device, and piping and instrumentation diagrams.
    - (2) The dates and descriptions of any changes in the design specifications.
    - (3) The flare design (i.e., steam-assisted, air-assisted, or non-assisted) and the results of the compliance demonstration required by 40 CFR 63.11(b) of 40 CFR 63 Subpart A.
    - (4) A description of the parameter or parameters monitored, as required in 40 CFR 63.172(e), to ensure that control devices are operated and maintained in conformance with their design and an explanation of why that parameter (or parameters) was selected for the monitoring.
  - (ii) Records of operation of closed-vent systems and control devices, as specified in 40 CFR 63.181(g)(2)(i) through (g)(2)(iii) shall be retained for 2 years.
    - (1) Dates and durations when the closed-vent systems and control devices required in 40 CFR 63.163 through 63.166, and 63.170 are not operated as designed as indicated by the monitored parameters, including periods when a flare pilot light system does not have a flame.
    - (2) Dates and durations during which the monitoring system or monitoring device is inoperative.
    - (3) Dates and durations of start-ups and shutdowns of control devices required in 40 CFR 63.163 through 63.166, and 63.170.
  - (iii) Records of inspections of closed-vent systems subject to the provisions of 40 CFR 63.172, as specified in 40 CFR 63.181(g)(3)(i) and (g)(3)(ii) shall be retained for 2 years.
    - (1) For each inspection conducted in accordance with the provisions of 40 CFR 63.172(f)(1) or (f)(2) during which no leaks were detected, a record that the inspection was performed, the date of the inspection, and a statement that no leaks were detected.
    - (2) For each inspection conducted in accordance with 63.172(f)(1) or (f)(2) during which leaks were detected, the information specified in 40 CFR 63.181(d) shall be recorded.
- t. If the permittee implements any of the quality improvement programs required by 40 CFR 63.175 or 63.176, the records specified in 40 CFR 63.181(h) shall be maintained for a period of the quality improvement plan for the process unit.

**SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)****6. Specific Reporting Requirements:**

- a. Refer to **Section B, Group Requirements**.
- b. EPA Reference Method 9 observations shall be submitted to the Paducah Regional Office, in accordance with **4.b. Specific Monitoring Requirements**.
- c. For equipment subject to 40 CFR 63 Subpart FFFF, the permittee shall submit the following reports:
  - (i) 40 CFR 63.2515(b), Initial Notification – The permittee has fulfilled this requirement through documentation dated March 8, 2004 submitted to U.S. EPA Region IV and the Division.
  - (ii) A notification of performance test at least 60 calendar days before the performance test is scheduled to begin as required in 40 CFR 63.7(b)(1), if applicable. [40 CFR 63.2515(c)]
  - (iii) A Notification of compliance status report containing the information specified in 40 CFR 63.2520(d) no later than 150 days after the compliance date specified in 40 CFR 63.2445.
  - (iv) A Compliance report containing the information specified in 40 CFR 63.2520(e) semiannually according to the requirements in 40 CFR 63.2520(b).
- d. The permittee shall furnish reports as specified in **5. Specific Recordkeeping Requirements**.
- e. Also refer to **Section F.5**.

**Wastewater Streams**

- f. For the Group 2 wastewater stream, the permittee shall submit the information specified in Table 15 of Subpart G of Part 63 as part of the Notification of Compliance. [40 CFR 63.146(b)(1) and (2)]

**7. Specific Control Equipment Operating Conditions:**

- a. The particulate control devices shall be in operation at all times the Product Transfer Collectors at EP S04, S08 and S12 are operating.
- b. Preventive maintenance shall be performed, for all particulate control devices, in accordance with the manufacturers' recommendations. Each device shall be inspected monthly for proper operation of the following:
  - (i) Pulse jet device to release dust cake from bags.
  - (ii) Air flow source and equipment.
  - (iii) Pressure drop measuring system.
- c. The permittee shall maintain the pressure drop across each dust collector and the flow rate and temperature of the scrubbing liquid at the scrubbers at EP S01 and S02 within the range recommended by the manufacturer or established during the most recent stack test.
- d. The scrubbers at EP S01 and S02 shall be in operation at all times when emissions are vented to them.
- e. The scrubbers at EP S01 and S02 shall be operated and maintained in accordance with manufacturer's specifications.

**SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

**8. Alternate Operating Scenarios:**

- a. For the occurrences of turbo dryer start-ups at EP S02(A1), S02(B1), S02(C1) or S02(D1), the permittee shall follow the Startup, Shutdown, and Malfunction Plan requirements of 40 CFR 63 Subparts A and FFFF.
- b. For the pipeline equipment subject to 40 CFR 63.2480(a) and Table 6 to Subpart FFFF, the permittee may comply with one of the following requirements.
  - (i) Subpart UU of 40 CFR 63 and the requirements referenced therein, except as specified in §63.2480(b) and (d);
  - (ii) Subpart H of 40 CFR 63 and the requirements referenced therein, except as specified in §63.2480(b) and (d); or
  - (iii) 40 CFR 65, subpart F and the requirements referenced therein, except as specified in § 63.2480(c) and (d).

## SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

### POLYRECTIFICATION AREA

EP	Emission Point Description
<b>F01(8-)</b>	<b>Description: Polymethanol Tower</b> - Separates Vinyl Extraction Tower Bottoms to Methanol and Water <u>Maximum Processing Rate:</u> 75,000 lb/hr <u>Construction Date:</u> 1959 <u>Control Device:</u> Flare, BA-5000 (see Section B, EP F01)
8A	Polymethanol Tower, DA-5103 (F01(8A) bottoms product stream to F01(10A), overheads to Condenser, EA-5109, to F01(8B)) MON Group 2 Wastewater Stream
8B	Polymethanol Reflux Accumulator, FA-5120 <u>Capacity:</u> 1,070 gallons (F01(8B) product stream to F01(8A) or T05, exhaust to atmosphere) MON Group 1 Process Vent
<b>R01</b>	<b>Polymethanol Tower Startups</b> <u>Description:</u> 12 events/yr not to exceed 48 hr/yr total
<b>F01(9-)</b>	<b>Description: Vinyl Recovery Tower</b> - Purifies Vinyl Extraction Tower Overheads <u>Maximum Processing Rate:</u> 55,420 lb/hr <u>Construction Date:</u> 1959 <u>Control Device:</u> Flare, BA-5000 (see Section B, EP F01)
9A	Vinyl Recovery Tower, DA-5104 (F01(9A) bottoms product stream to F01(9E), overheads to F01(9B) and F01(9C))
9B	West Vinyl Recovery Condenser, EA-5111A (F01(9B) product stream to F01(9D), exhaust to Control Device F01) MON Group 1 Process Vent
9C	East Vinyl Recovery Condenser, EA-5108 (F01(9C) product stream to F01(9D), exhaust to Control Device F01) MON Group 1 Process Vent
9D	Vinyl Recovery Tower Accumulator, FA-5107 <u>Capacity:</u> 9,170 gallons (F01(9D) product stream to F01(9F), exhaust to Control Device F01) MON Group 1 Process Vent, MON Group 1 Wastewater Stream
9E	Vinyl Sludge Still, FA-5117
9F	Vinyl Redistillation Tower, DA-5105 (F01(9F) product stream to F01(9G))
9G	Redistillation Condenser, EA-5171 (F01(9G) product stream to T10)
<b>R02</b>	<b>Vinyl Recovery Tower Startups</b> <u>Description:</u> 12 events/yr not to exceed 48 hr/yr total
<b>F01(10-)</b>	<b>Description: Vinyl Extraction Tower</b> - Separates Polymerization Unit Paste Stripper Accumulator Overheads to Vinyl Acetate and Methanol <u>Maximum Processing Rate:</u> 55,260 lb/hr <u>Construction Date:</u> 1996 <u>Control Device:</u> Flare, BA-5000 (see Section B, EP F01)
10A	Vinyl Extraction Tower, DA-5110 (F01(10A) bottoms product stream to F01(8A), overheads to F01(10D))
10B	Vinyl Extraction Tower Condenser, EA-5170 (F01(10B) product stream to F01(10D))

## SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

EP	Emission Point Description
10D	Vinyl Extraction Tower Accumulator, FA-5104 <u>Capacity</u> : 3,100 gallons F01(10D) product stream to F01(9A), exhaust to Control Device F01) MON Group 1 Process Vent, MON Group 1 Wastewater Stream
R03	<b>Vinyl Extraction Tower Startups</b> <u>Description</u> : 12 events/yr not to exceed 48 hr/yr total
F01(20A)	<b>Description: Vinyl Prefrac Tower, DA-5102</b> <u>Maximum Processing Rate</u> : 25,000 lb/hr Methanol, 15,000 lb/hr Vinyl Acetate <u>Construction Date</u> : 1959 (Exhaust to Control Device F01)
R04	<b>Inhibitor (BQ) Feed Tank, FA-5109</b> <u>Description</u> : Vinyl Acetate Storage Tank <u>Capacity</u> : 265 gallons <u>Maximum Throughput</u> : 193,450 gallons/yr <u>Construction Date</u> : 1984 <u>Maximum True Vapor Pressure</u> : 1.26 psia MON Group 2 Storage Tank
R05	<b>Polyrectification Process Unit Fugitives</b> (Approximately 46 Pumps/Agitators, 16 Pressure Relief Valves, 456 Valves and 1,356 Connectors)

### APPLICABLE REGULATIONS:

This source has elected to accept annual limits in order to preclude the applicability of 401 KAR 51:017, *Prevention of Significant Deterioration of Air Quality (PSD)* for volatile organic compounds.

40 CFR 60, Subpart VV (40 CFR 60.480), *Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry*, is applicable to the Polyrectification Area units, as these units produce vinyl acetate, which is listed under 40 CFR 60.489, as an intermediate. However, the permittee may elect to comply with 40 CFR 63 Subpart H or Subpart UU, as referenced by Subpart FFFF instead of 40 CFR 60 Subpart VV after the compliance date of 40 CFR 63 Subpart FFFF.

40 CFR 60, Subpart NNN, *Standards of Performance for Volatile Organic Compound (VOC) Emissions From Synthetic Organic Chemical Manufacturing Industry (SOCMI) Distillation Operations*, is applicable to the Polyrectification Area units, as these units produce vinyl acetate, which is listed under 40 CFR 60.667, as an intermediate. However, the permittee may elect to comply with 40 CFR 63 Subpart FFFF instead of 40 CFR 60 Subpart NNN after the compliance date of 40 CFR 63 Subpart FFFF.

401 KAR 63:002, Sections 2 and 3(1)(e), which incorporates by reference 40 CFR 63 Subpart G, *National Emission Standards for Organic Hazardous Air Pollutants from the Synthetic Organic Chemical Manufacturing Industry for Process Vents, Storage Vessels, Transfer Operations, and Wastewater*, is applicable pursuant to 40 CFR 63, Subpart FFFF, and applies to the process wastewater streams.

401 KAR 63:002, Sections 2 and 3(1)(f), which incorporates by reference 40 CFR 63 Subpart H, *National Emission Standards for Organic Hazardous Air Pollutants from Equipment Leaks*, is applicable pursuant to 40 CFR 63, Subpart FFFF, and applies to the equipment leaks.

401 KAR 63:002, Sections 2 and 3(1)(kk), which incorporates by reference 40 CFR 63 Subpart SS, *National Emission Standards for Closed Vent Systems, Control Devices, Recovery Devices*



**SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

*and Routing to a Fuel Gas System or a Process*, is applicable pursuant to 40 CFR 63, Subpart FFFF, and applies to the closed vent systems routing vapors to a control device and to the flare (EP F01).

401 KAR 63:002, Sections 2 and 3(1)(mmm), which incorporates by reference 40 CFR 63 Subpart FFFF, *National Emission Standards for Hazardous Air Pollutants: Miscellaneous Organic Chemical Manufacturing*, applies to the Polymerization, Saponification, and Polyrectification Areas, as these areas produce polyvinyl alcohol, listed under Table 1 of 40 CFR 63 Subpart B, *Requirements for Control Technology Determinations for Major Sources in Accordance with Clean Air Act Sections, Sections 112(g) and 112(j)*, as a MON Source Category. 40 CFR 63.2455 applies to EP F01(8B), F01(9B), F01(9C) and F01(9D), each as a Group 1 continuous process vent pursuant to 40 CFR 63.2455(b). 40 CFR 63.2470 applies to the Group 2 storage tank at EP R04. 40 CFR 63.2480 applies to the equipment leaks. 40 CFR 63.2485 applies to the wastewater streams from EP F01(8A), F01(9D) and F01(10D).

401 KAR 63:020, *Potentially Hazardous Matter or Toxic Substances*, applies to sources which emit or may emit potentially hazardous or toxic substances.

**NON-APPLICABLE REGULATIONS:**

401 KAR 60:005, Sections 2 and 3(1)(q), which incorporates by reference 40 CFR 60, Subpart Kb (40 CFR 60.112b), *Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced after July 23, 1984*, does not apply to the storage tank at EP R04 because the storage capacity of each tank is less than the rule applicability threshold of 75 m<sup>3</sup> (19,812 gallons).

401 KAR 63:002, Sections 2 and 3(1)(d), which incorporates by reference 40 CFR 63 Subpart F, *National Emission Standards for Organic Hazardous Air Pollutants from the Synthetic Organic Chemical Manufacturing Industry*, and related Subparts G and H, are not applicable to the Polyrectification Area units, as these do not produce chemicals listed under Table 1 of 40 CFR 63, Subpart F as a primary product. This determination notwithstanding, specific provisions of Subpart G and H are included in this section since they are incorporated by reference in 40 CFR 63 Subpart FFFF.

401 KAR 63:002, Sections 2 and 3(1)(lll), which incorporates by reference 40 CFR 63 Subpart EEEE, *National Emission Standards for Hazardous Air Pollutants: Organic Liquids Distribution (Non-Gasoline)*, does not apply to the organic liquid distribution of methanol and vinyl acetate, listed under Table 1 of 40 CFR 63 Subpart EEEE, in the Polyrectification Area, because these operations are subject to 40 CFR 63, Subpart FFFF.

**State-Origin Applicable Regulations:**

Permit No. S-95-198R, issued on June 4, 1998, Permit No. S-97-054, issued on May 20, 1997, Permit No. C-86-172, issued on August 8, 1986, and Permit No. C-84-146, issued on August 21, 1984. See **Section B, Group Requirements**.

**1. Operating Limitations:**

- a. Refer to **Section B, Group Requirements**.
- b. The provisions of 40 CFR Part 63, Subpart A - General Provisions, which are incorporated by reference in 401 KAR 63:002 Section 3(a), apply to the equipment listed in this section that is subject to Subpart FFFF. Table 12 to Subpart FFFF of

**SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

Part 63 specifies the provisions of Subpart A that apply and those that do not apply. [40 CFR Part 63.2540]

Process Vents and Closed Vent Systems

- c. Pursuant to 40 CFR 63.2455(a) and Table 1 of Subpart FFFF, on or before the compliance date in 40 CFR 63.2445(b), all Group 1 process vents of EP F01(8B), F01(9B), F01(9C), F01(9D), and F01(10D) shall be vented to a flare. See **Section B** for the flare (EP F01).
- d. Pursuant to 40 CFR 63.982(b), as incorporated by reference in 40 CFR 63 Subpart FFFF, the permittee shall comply with the following provisions for the closed vent systems routing the vapors from EP F01(8B), F01(9B), F01(9C), F01(9D), and F01(10D) to the flare: [40 CFR 63.2450(e)(2) and 40 CFR 63.983(a)]
  - (i) Closed vent systems shall be designed and operated to collect the regulated material vapors from the emission points, and to route the collected vapors to a control device. [40 CFR 63.983(a)(1)]
  - (ii) Closed vent systems shall be operated at all times when emissions are vented to, or collected by, them. [40 CFR 63.983(a)(2)]
- e. Except for equipment needed for safety purposes such as pressure relief devices, low leg drains, high point bleeds, analyzer vents, and open-ended valves or lines, the permittee shall comply with the provisions of either of the following paragraphs (i) or (ii) below for each closed vent system that contains bypass lines that could divert a vent stream to the atmosphere. [40 CFR 63.983(a)(3)]
  - (i) Properly install, maintain, and operate a flow indicator at the entrance to any bypass line that is capable of taking periodic readings.
  - (ii) Secure the bypass line valve in the non-diverting position with a car-seal or a lock-and-key type configuration.
- f. If there are visible, audible, or olfactory indications of leaks at the time of the annual visual inspections required by 40 CFR 63.983(b)(1)(i)(B), the permittee shall comply with either of the following procedures. [40 CFR 63.983(d)(1)]
  - (i) Eliminate the leak.
  - (ii) Monitor the equipment according to the procedures in 40 CFR 63.983(c).
- g. Leaks, as indicated by an instrument reading greater than 500 ppm by volume above background or by visual inspections, shall be repaired as soon as practical. [40 CFR 63.983(d)(2)]
  - (i) A first attempt at repair shall be made no later than 5 days after the leak is detected.
  - (ii) Expects as provided in 40 CFR 63.983(d)(3) for delay of repair, repairs shall be completed no later than 15 days after the leak is detected or at the beginning of the next introduction of vapors to the system, whichever is later.

Wastewater Streams

- h. The permittee shall not discard liquid or solid organic materials with a concentration of greater than 10,000 parts per million of compounds in Tables 8 and 9 of 40 CFR 63 Subpart FFFF (as determined by analysis of the stream composition, engineering calculations, or process knowledge, according to the

**SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

provisions of 40 CFR 63.144(b)) from a chemical manufacturing process unit to water or wastewater, unless the receiving stream is managed and treated as a Group 1 wastewater stream. This prohibition does not apply to materials from the following activities: [40 CFR 63.132(f)]

- (i) Equipment leaks;
  - (ii) Activities included in maintenance or startup/shutdown/malfunction plans;
  - (iii) Spills; or
  - (iv) Samples of a size not greater than reasonably necessary for the method of analysis that is used.
- i. For the Group 1 wastewater stream from EP F01(9D), the permittee has elected to transfer this stream to an off-site treatment operation. [40 CFR 63.132(g)]

Pipeline Equipment

- j. The permittee must comply with the applicable requirements of 40 CFR 60 Subpart VV until the 40 CFR 63 Subpart FFFF compliance date specified in 40 CFR 63.2445(b), at which time the permittee may comply with the requirements of Subpart FFFF or Subpart VV.
- k. For the pipeline equipment in organic hazardous air pollutant service, the permittee shall implement a leak detection and repair (LDAR) program containing the following elements:
- (i) Each piece of pipeline equipment subject to 40 CFR 63 Subpart FFFF shall be identified such that it can be distinguished readily from equipment that is not subject to 40 CFR 63 Subpart H. [40 CFR 63.162(c)]
  - (ii) When a leak is detected as specified in 40 CFR 63.163 and 63.164; 63.168 and 63.169; and 63.172 through 63.174, the permittee shall: [40 CFR 63.162(f)]
    - (1) Clearly identify the leaking equipment.
    - (2) The identification on a valve may be removed after it has been monitored as specified in 40 CFR 63.168(f)(3) and 63.175(e)(7)(i)(D), and no leak has been detected during the follow-up monitoring. If the permittee elects to comply using the provisions of 40 CFR 63.174(c)(1)(i), the identification on a connector may be removed after it is monitored and no leak is detected during that monitoring.
    - (3) The identification which has been placed on equipment determined to have a leak, except for a valve or for a connector that is subject to 40 CFR 63.174(c)(1)(i), may be removed after it is repaired.
  - (iii) Specific standards for each type of pipeline equipment described under 2.

Emission Limitations.

**Compliance Demonstration Method:**

- a. Refer to **Section B, Group Requirements.**
- b. Refer to **4. Specific Monitoring Requirements** for Process Vents and Closed Vent Systems.

**SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**Wastewater Streams

- c. Total annual average concentration shall be determined according to the procedures specified in 40 CFR 63.144(b). Annual average flow rate shall be determined according to the procedures specified in 40 CFR 63.144(c). [40 CFR 63.132(c)]
- d. For a Group 2 wastewater, the permittee shall re-determine group status for each Group 2 stream, as necessary, to determine whether the stream is Group 1 or Group 2 whenever process changes are made that could reasonably be expected to change the stream to a Group 1 stream. Examples of process changes include, but are not limited to, changes in production capacity, production rate, feedstock type, or whenever there is a replacement, removal, or addition of recovery or control equipment. For purposes of this paragraph, process changes do not include: Process upsets; unintentional, temporary process changes; and changes that are within the range on which the original determination was based. [40 CFR 63.132(c)(3)]
- e. Refer to **4. Specific Monitoring Requirements** for Wastewater Streams.

Pipeline Equipment

- f. Compliance shall be determined by review of the records required by 40 CFR 63.181 and the reports required by 40 CFR 63.182, review of performance test results, and by inspections. [40 CFR 63.162(a)]

**2. Emission Limitations:**

- a. Refer to **Section B, Group Requirements**.
- b. Pursuant to 401 KAR 63:020, no owner or operator shall allow any affected facility to emit potentially hazardous matter or toxic substances in such quantities or duration as to be harmful to the health and welfare of humans, animals and plants.

Pipeline Equipment

- c. The permittee shall comply with the fugitive emissions standards, as applicable. See below for detailed standards for different services:
  - (i) Standards: Pumps in light liquid service [40 CFR 63.163]:
    - 40 CFR 63.163(a): Implementation and compliance provisions
    - 40 CFR 63.163(b): Monitoring requirements, leak detection levels, frequency of monitoring
    - 40 CFR 63.163(c): Repair procedures and time frames
    - 40 CFR 63.163(d): Procedures to determine percent leaking pumps and quality improvement program requirements
    - 40 CFR 63.163(e)-(j): Exemptions for specific types of pumps
  - (ii) Standards: Compressors [40 CFR 63.164]
    - 40 CFR 63.164(a)-(e): Operational requirements
    - 40 CFR 63.164(f): Criteria for leak detection
    - 40 CFR 63.164(g): Repair procedures and time frames
    - 40 CFR 63.164(h)-(i): Exemptions for specific types of compressors

**SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

- (iii) Standards: Pressure relief devices in gas/vapor service [40 CFR 63.165]:
  - 40 CFR 63.165(a): Operational requirements
  - 40 CFR 63.165(b): Pressure release procedures
  - 40 CFR 63.165(c)-(d): Exemptions for specific types of pressure relief devices
- (iv) Standards: Sampling Connection Systems [40 CFR 63.166]:
  - 40 CFR 63.166(a)-(b): Operational requirements
  - 40 CFR 63.166(c): Exemptions for specific types of sampling connection systems
- (v) Standards: Open-ended valves or lines [40 CFR 63.167]:
  - 40 CFR 63.167(a)-(c): Operational requirements
  - 40 CFR 63.167(d)-(e): Exemptions for specific types of valves
- (vi) Standards: Valves in gas/vapor service and in light liquid service [40 CFR 63.168]:
  - 40 CFR 63.168(a): Operational requirements
  - 40 CFR 63.168(b)-(d): Monitoring requirements and intervals
  - 40 CFR 63.168(e): Procedures to determine percent leaking valves
  - 40 CFR 63.168(f): Leak repair time frames
  - 40 CFR 63.168(g): First attempt repair procedures
  - 40 CFR 63.168(h): Exemptions for unsafe-to-monitor valves
  - 40 CFR 63.168(i): Exemptions for difficult-to-monitor valves
- (vii) Standards: Instrumentation systems [40 CFR 63.169]:
  - 40 CFR 63.169(a): Monitoring frequency
  - 40 CFR 63.169(b): Leak detection levels
  - 40 CFR 63.169(c): Leak repair time frames
- (viii) Standards: Delay of repair [40 CFR 63.171]:
  - 40 CFR 63.171 Allowances for delay of repair
- (ix) Standards: Closed-vent systems and control devices [40 CFR 63.172]:
  - 40 CFR 63.172(a)-(b): Operational requirements
  - 40 CFR 63.172(d),(m): Control device requirements
  - 40 CFR 63.172(f)-(g): Monitoring requirements
  - 40 CFR 63.172(h)-(i): Repair procedures and time frames
  - 40 CFR 63.172 (j): Operational requirements for bypass lines
  - 40 CFR 63.172(k)-(l): Exemptions for unsafe-to-inspect and difficult-to-inspect closed-vent systems
- (x) Standards: Agitators in gas/vapor service and in light liquid service [40 CFR 63.173]:
  - 40 CFR 63.173(a): Operational requirements
  - 40 CFR 63.173(b): Monitoring requirements and intervals
  - 40 CFR 63.173(c): Leak repair time frames
  - 40 CFR 63.173(d)-(g): Exemptions for specific types of agitators
  - 40 CFR 63.173(h)-(j): Exemptions for difficult-to-monitor, inaccessible or unsafe-to-monitor agitators
- (xi) Standards: connectors in gas/vapor service and in light liquid service.  
Pursuant to 40 CFR 63.2480(b)(4), the permittee may elect to comply

**SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

- with the standards in 40 CFR 63.174 or the standards in 40 CFR 63.169 for connectors in heavy liquid service:
- 40 CFR 63.169(a): Monitoring frequency
  - 40 CFR 63.169(b): Leak detection levels
  - 40 CFR 63.169(c): Leak repair time frames
  - 40 CFR 63.174(a): Operational requirements
  - 40 CFR 63.174(b): Monitoring requirements and intervals
  - 40 CFR 63.174(c): Procedures for open connectors or connectors with broken seals
  - 40 CFR 63.174(d): Leak repair time frames
  - 40 CFR 63.174(e): Monitoring frequency for repaired connectors
  - 40 CFR 63.174(f)-(h): Exemptions for unsafe-to-monitor, unsafe-to-repair, inaccessible, or ceramic connectors
  - 40 CFR 63.174(i): Procedures to determine percent leaking connectors
  - 40 CFR 63.174(j): Optional credit for removed connectors
- (xii) Quality improvement program for valves [40 CFR 63.175]: Pursuant to 40 CFR 63.168(d)(1)(ii), in Phase III, the permittee may elect to implement the following quality improvement programs if the percent of leaking valves is equal to or exceeds 2 percent:
- 40 CFR 63.175(a): Quality improvement program alternatives
  - 40 CFR 63.175(b): Criteria for ending quality improvement programs
  - 40 CFR 63.175(c): Alternatives following achievement of less than 2 percent leaking valves target
  - 40 CFR 63.175(d): Quality improvement program to demonstrate further progress
  - 40 CFR 63.175(e): Quality improvement program of technology review and improvement
- (xiii) Quality improvement program for pumps [40 CFR 63.176]: Pursuant to 40 CFR 63.163(d)(2), if, in Phase III, calculated on a 6-month rolling average, the greater of either 10 percent of the pumps or three pumps in the Polymerization, Saponification, or Polyrectification Areas leak, the permittee shall implement the following quality improvement programs for pumps:
- 40 CFR 63.176(a): Applicability criteria
  - 40 CFR 63.176(b): Criteria for ending the quality improvement program
  - 40 CFR 63.176(c): Criteria for resumption of the quality improvement program
  - 40 CFR 63.176(d): Quality improvement program elements
- (xiv) The requirements for pressure testing in 40 CFR 63.178(b) may be applied to all processes, not just batch processes. The permittee may elect to use pressure testing of equipment to demonstrate compliance by meeting the following requirements of 40 CFR 63.178(b). Compliance with the provisions of 40 CFR 63.178(b) exempts the permittee from the

**SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

monitoring provisions of 40 CFR 63.163, 63.168 and 63.169, and 63.173 through 63.176. [40 CFR 63.2480(b)(1) and 63.178(b)]

- (1) The permittee may switch among the alternatives provided the change is documented as specified in 40 CFR 63.181.[40 CFR 63.178(a)]
- (2) For the purposes of 40 CFR 63 Subpart FFFF, pressure testing for leaks in accordance with 63.178(b) is not required after reconfiguration of an equipment train if flexible hose connections are the only disturbed equipment.

**Compliance Demonstration Method:**

- a. Refer to **Section B, Group Requirements**.
- b. For compliance with 401 KAR 63:020, if the source alters process rates, material formulations, or any other factor that would result in an increase of HAP emissions or the addition of HAP emissions not previously evaluated by the Division, the source shall submit the appropriate application forms pursuant to 401 KAR 52:020, along with air modeling to show that the facility will remain in compliance with 401 KAR 63:020. The source may perform a screening analysis of the potential to emit of acetaldehyde, methanol, methyl acetate, vinyl acetate, and any other toxic pollutant emissions at the plant and compare it to established benchmarks (i.e. Reference Concentrations (RfCs), Unit Risk Estimates (UREs), as applicable).

Pipeline Equipment

- c. Compliance shall be determined by review of the records required by 40 CFR 63.181 and by inspections. [40 CFR 63.162(a)]

**3. Testing Requirements:**Process Vents

- a. Refer to **3. Testing Requirements** for the flare (**Section B**, EP F01).

Pipeline Equipment

- b. The permittee shall comply with the following test methods and procedures requirements pursuant to 40 CFR 63.180(a):
  - (i) Monitoring shall comply with Method 21 of 40 CFR part 60, appendix A. [40 CFR 63.180(b)(1)]
  - (ii) The detection instrument shall meet the performance criteria of Method 21 of 40 CFR part 60, appendix A, except the instrument response factor criteria in Section 3.1.2(a) of Method 21 shall be for the average composition of the process fluid not each individual VOC in the stream. For process streams that contain nitrogen, water, air, or other inerts which are not organic HAPs or VOCs, the average stream response factor may be calculated on an inert-free basis. The response factor may be determined at any concentration for which monitoring for leaks will be conducted. If no instrument is available at the plant site that will meet the performance criteria, the instrument readings may be adjusted by multiplying by the

**SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

- average response factor of the process fluid, calculated on an inert-free basis. [40 CFR 63.180(b)(2)]
- (iii) The instrument shall be calibrated before use on each day of its use by the procedures specified in Method 21 of 40 CFR part 60, appendix A. [40 CFR 63.180(b)(3)]
  - (iv) Calibration gases shall be: [40 CFR 63.180(b)(4)]
    - (1) Zero air (less than 10 parts per million of hydrocarbon in air); and
    - (2) Mixtures of methane in air at the concentrations specified in paragraphs 63.180(b)(4)(ii)(A) through (b)(4)(ii)(C). A calibration gas other than methane in air may be used if the instrument does not respond to methane or if the instrument does not meet the performance criteria specified in 40 CFR 63.180(b)(2)(i). In such cases, the calibration gas may be a mixture of one or more of the compounds to be measured in air.
    - (3) The instrument may be calibrated at a higher methane concentration than the concentration specified for that piece of equipment. The concentration of the calibration gas may exceed the concentration specified as a leak by no more than 2,000 parts per million. If the monitoring instrument's design allows for multiple calibration scales, then the lower scale shall be calibrated with a calibration gas that is no higher than 2,000 parts per million above the concentration specified as a leak and the highest scale shall be calibrated with a calibration gas that is approximately equal to 10,000 parts per million. If only one scale on an instrument will be used during monitoring, the permittee need not calibrate the scales that will not be used during that day's monitoring.
  - (v) Monitoring shall be performed when the equipment is in organic HAP service, in use with an acceptable surrogate volatile organic compound which is not an organic HAP, or is in use with any other detectable gas or vapor. [40 CFR 63.180(b)(5)]
  - (vi) Monitoring data that do not meet the criteria specified in 40 CFR 63.180(b)(1) through (b)(5) may be used to qualify for less frequent monitoring under the provisions in 40 CFR 63.168(d)(2) and (d)(3) or 63.174(b)(3)(ii) or (b)(3)(iii) provided the data meet the following conditions. [40 CFR 63.180(b)(6)]
    - (1) The data were obtained before April 22, 1994.
    - (2) The departures from the criteria specified in 40 CFR 63.180(b)(1) through (b)(5) or from the specified monitoring frequency of 40 CFR 63.168(c) are minor and do not significantly affect the quality of the data. Examples of minor departures are monitoring at a slightly different frequency (such as every six weeks instead of monthly or quarterly), following the performance criteria of section 3.1.2(a) of Method 21 of appendix A of 40 CFR part 60 instead of 40 CFR 63.180(b)(2), or monitoring at a different leak definition if the data would indicate the presence or absence of a



**SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

leak at the concentration specified in this subpart. Failure to use a calibrated instrument is not considered a minor departure.

- (vii) When equipment is monitored for compliance as required in 40 CFR 63.164(i), 63.165(a), and 63.172(f) or when equipment subject to a leak definition of 500 ppm is monitored for leaks as required by 40 CFR 63 Subpart H, the permittee may elect to adjust or not to adjust the instrument readings for background. If the permittee elects to not adjust instrument readings for background, the permittee shall monitor the equipment according to the procedures specified in 40 CFR 63.180(b)(1) through (b)(4). In such case, all instrument readings shall be compared directly to the applicable leak definition to determine whether there is a leak. If the permittee elects to adjust instrument readings for background, the permittee shall monitor the equipment according to the following procedures. [40 CFR 63.180(c)]
  - (1) The requirements of 40 CFR 63.180(b)(1) through (4) shall apply.
  - (2) The background level shall be determined, using the same procedures that will be used to determine whether the equipment is leaking.
  - (3) The instrument probe shall be traversed around all potential leak interfaces as close to the interface as possible as described in Method 21 of 40 CFR part 60, appendix A.
  - (4) The arithmetic difference between the maximum concentration indicated by the instrument and the background level is compared with 500 parts per million for determining compliance.
- (viii) (1) Each piece of equipment within a process unit that can reasonably be expected to contain equipment in organic HAP service is presumed to be in organic HAP service unless the permittee demonstrates that the piece of equipment is not in organic HAP service. For a piece of equipment to be considered not in organic HAP service, it must be determined that the percent organic HAP content can be reasonably expected not to exceed 5 percent by weight on an annual average basis. For purposes of determining the percent organic HAP content of the process fluid that is contained in or contacts equipment, Method 18 of 40 CFR part 60, appendix A shall be used. [40 CFR 63.180(d)]
  - (2) (A) The permittee may use good engineering judgment rather than the procedures in 40 CFR 63.180(d)(1) to determine that the percent organic HAP content does not exceed 5 percent by weight. When the permittee and the Division do not agree on whether a piece of equipment is not in organic HAP service, however, the procedures in 40 CFR 63.180(d)(1) shall be used to resolve the disagreement.
  - (B) Conversely, the permittee may determine that the organic HAP content of the process fluid does not exceed 5 percent by weight by, for example, accounting for 98 percent of the

**SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

content and showing that organic HAP is less than 3 percent.

- (3) If the permittee determines that a piece of equipment is in organic HAP service, the determination can be revised after following the procedures in 40 CFR 63.180(d)(1), or by documenting that a change in the process or raw materials no longer causes the equipment to be in organic HAP service.
- (4) Samples used in determining the percent organic HAP content shall be representative of the process fluid that is contained in or contacts the equipment.

**4. Specific Monitoring Requirements:**

- a. Refer to **Section B, Group Requirements**.

Process Vents and Closed Vent Systems

- b. Refer to **4. Specific Monitoring Requirements** for the flare (**Section B**, EP F01).
- c. Except for any closed vent systems that are designated as unsafe or difficult to inspect as provided in 40 CFR 63.983(b)(2) and (3), the permittee shall comply with the following requirements for each closed vent system. [40 CFR 63.983(b)(1)(i)]
  - (i) Conduct an initial inspection according to the procedures in 40 CFR 63.983(c); and
  - (ii) Conduct annual inspections for visible, audible, or olfactory indications of leaks.
- d. For each bypass line, the permittee shall comply with either of the following requirements. [40 CFR 63.983(b)(4)]
  - (i) If a flow indicator is used, take a reading at least once every 15 minutes.
  - (ii) If the bypass line valve is secured in the non-diverting position, visually inspect the seal or closure mechanism at least once every month to verify that the valve is maintained in the non-diverting position, and the vent stream is not diverted through the bypass line.

Wastewater Streams

- e. The permittee shall include a notice with the shipment or transport of each Group 1 wastewater stream stating that the wastewater stream contains organic hazardous air pollutants that are to be treated in accordance with the provisions of 40 CFR 63 Subpart G, as referenced by 40 CFR 63 Subpart FFFF. When the transport is continuous or ongoing, the notice shall be submitted to the treatment operator initially and whenever there is a change in the required treatment. [40 CFR 63.132(g)(1)(ii)]
- f. The permittee must comply with either of the following requirements: [40 CFR 63.132(g)(2) and 40 CFR 63.2485(i)(1)]
  - (i) The permittee may not transfer the wastewater stream unless the transferee has submitted to the Division a written certification, as specified in 40 CFR 63.132(g)(2). [40 CFR 63.132(g)(2)]

**SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

- (ii) The permittee may document in the notification of compliance status report that the wastewater will be treated as a hazardous waste at a facility that meets the requirements of 40 CFR 63.138(h). [40 CFR 63.2485(i)(1)]

Pipeline Equipment

- g. Refer to **3. Testing Requirements**.
- h. Fulfill all monitoring requirements per **2. Emission Limitations**.

**5. Specific Recordkeeping Requirements:**

- a. Refer to **Section B, Group Requirements**.
- b. All records shall be maintained in accordance with **Section F.2**.
- c. The permittee shall keep the following records: [40 CFR 63.2525]
  - (i) Each applicable record required by 40 CFR 63 Subpart A and in referenced subparts F, G and SS of this part 63. [40 CFR 63.2525(a)]
  - (ii) Records of each operating scenario as specified: [40 CFR 63.2525(b)]
    - (1) A description of the process and the type of process equipment used.
    - (2) An identification of related process vents, including their associated emissions episodes if not complying with the alternative standard in 40 CFR 63.2505; wastewater point of determination (POD); storage tanks; and transfer racks.
    - (3) The applicable control requirements of 40 CFR 63 Subpart FFFF, including the level of required control, and for vents, the level of control for each vent.
    - (4) The control device or treatment process used, as applicable, including a description of operating and/or testing conditions for any associated control device.
    - (5) The process vents, wastewater POD, transfer racks, and storage tanks (including those from other processes) that are simultaneously routed to the control device or treatment process(s).
    - (6) The applicable monitoring requirements of this subpart and any parametric level that assures compliance for all emissions routed to the control device or treatment process.
    - (7) Calculations and engineering analyses required to demonstrate compliance.
    - (8) For reporting purposes, a change to any of these elements not previously reported, except for 63.2525(b)(5), constitutes a new operating scenario.
  - (iii) In the SSMP required by 40 CFR 63.6(e)(3), the permittee is not required to include Group 2 emission points, unless those emission points are used in an emissions average. For equipment leaks, the SSMP requirement is limited to control devices and is optional for other equipment. [40 CFR 63.2525(j)]

Process Vents and Closed Vent Systems

- d. The permittee shall keep records as specified in **5. Specific Recordkeeping**

**SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)****Requirements** for the flare (Section B, EP F01).

- e. For the closed vent systems, the permittee shall record the following information. [40 CFR 63.998(d)(1)]
- (i) The identification of all parts of the closed vent system that are designated as unsafe or difficult to inspect, an explanation of why the equipment is unsafe or difficult to inspect, and the plan for inspecting the equipment required by 40 CFR 63.983(b)(2)(ii) or (iii).
  - (ii) The information specified in either 63.998(d)(1)(ii)(A) or (B), as applicable, for each closed vent system that contains bypass lines that could divert a vent stream away from the flare and to the atmosphere. [40 CFR 63.998(d)(1)(ii)]
    - (1) Hourly records of whether the flow indicator specified under 40 CFR 63.983(a)(3)(i) was operating and whether a diversion was detected at any time during the hour, as well as records of the times of all periods when the vent stream is diverted from the flare or the flow indicator is not operating; or
    - (2) Where a seal mechanism is used to comply with 63.983(a)(3)(ii), hourly records of flow are not required. In such cases, the permittee shall record that the monthly visual inspection of the seals or closure mechanisms has been done, and shall record the occurrence of all periods when the seal mechanism is broken, the bypass line valve position has changed, or the key for a lock-and-key type lock has been checked out, and records of any car-seal that has been broken.
  - (iii) The following information, when a leak is detected as specified in 40 CFR 63.983(d)(2). These records shall be kept for 5 years. [40 CFR 63.998(d)(1)(iii)]
    - (1) The instrument and equipment identification number and the operator name, initials, or identification number.
    - (2) The date the leak was detected and the date of the first attempt to repair the leak.
    - (3) The date of successful repair of the leak.
    - (4) The maximum instrument reading measured by the procedures in 40 CFR 63.983(c) after the leak is successfully repaired or determined to be nonrepairable.
    - (5) "Repair delayed" and the reason for the delay if a leak is not repaired within 15 days after discovery of the leak. The permittee may develop a written procedure that identifies the conditions that justify a delay of repair. In such cases, reasons for delay of repair may be documented by citing the relevant sections of the written procedure.
    - (6) Copies of the Periodic Reports as specified in 40 CFR 63.999(c), if records are not maintained on a computerized database capable of generating summary reports from the records.
  - (iv) For each instrumental or visual inspection conducted in accordance with 63.983(b)(1) during which no leaks are detected, a record that the

**SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

inspection was performed, the date of the inspection, and a statement that no leaks were detected. [40 CFR 63.998(d)(iv)]

- f. Pursuant to 40 CFR 63.982(e), as incorporated by reference in 40 CFR 63.2455(c), for the Group 2 process vents at EP S01 and S02, TRE index value determination information shall be recorded as specified in 40 CFR 63.998(a)(3). [40 CFR 63.993(b)]

Storage Vessels

- g. For all Group 2 storage vessels, a record shall be kept for as long as the liquid is stored of the dimensions of the storage vessel, an analysis of the capacity of the storage vessel, and an identification of the liquid stored. [40 CFR 63.1065(a)]

Wastewater Streams

- h. For the Group 1 wastewater stream transferred in accordance with 63.132(g), the permittee shall keep a record of the notice sent to the treatment operator stating that the wastewater stream contains organic hazardous air pollutants which are required to be managed and treated in accordance with the provisions of 40 CFR 63 Subpart G, as referenced by 40 CFR 63 Subpart FFFF. [40 CFR 63.147(a)]
- i. For the Group 2 wastewater streams, the permittee shall keep in a readily accessible location the following records. [40 CFR 63.147(b)(8)]
- (i) Process unit identification and description of the process unit.
  - (ii) Stream identification code.
  - (iii) The concentration of the compound(s) in Tables 8 and 9 of 40 CFR 63 Subpart FFFF, (s) in parts per million, by weight, including documentation of the methodology used to determine concentration.
  - (iv) Flow rate in liter per minute.
  - (v) The documentation of how process knowledge was used to determine the annual average concentration and/or the annual average flow rate of the wastewater stream, if the permittee uses process knowledge to determine the annual average concentration of a wastewater stream and/or the annual average flow rate, and determines that the wastewater stream is not a Group 1 wastewater stream. [40 CFR 63.147(f)]
- j. Refer to **4. Specific Monitoring Requirements** for Wastewater Streams.

Pipeline Equipment

- k. The permittee may comply with the recordkeeping requirements for the equipment in the Polymerization, Saponification and Polyrectification Areas in one recordkeeping system if the system identifies each record by process unit and the program being implemented (e.g., quarterly monitoring, quality improvement) for each type of equipment. All records required by 40 CFR 63.181 shall be maintained in a manner that can be readily accessed at the plant site. [40 CFR 63.181(a)]
- l. The permittee shall maintain all records pertaining to the pipeline equipment required by 40 CFR 63.181(b).

**SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

- (i)
    - (1) A list of identification numbers for equipment (except instrumentation systems) subject to the requirements of this subpart. [40 CFR 63.181(b)(1)(i)]
    - (2) A schedule by process unit for monitoring connectors subject to 40 CFR 63.174(a) and valves subject to 40 CFR 63.168(d).
    - (3) Physical tagging of the equipment to indicate that it is in organic HAP service is not required. Equipment subject to the provisions of this subpart may be identified on a plant site plan, in log entries, or by other appropriate methods.
  - (ii)
    - (1) A list of identification numbers for equipment that the permittee elects to equip with a closed-vent system and control device, under the provisions of 40 CFR 63.163(g), 63.164(h), 63.165(c), or 63.173(f). [40 CFR 63.181(b)(2)(i)]
    - (2) A list of identification numbers for compressors that the permittee elects to designate as operating with an instrument reading of less than 500 parts per million above background, under the provisions of 40 CFR 63.164(i).
  - (iii) A list of identification numbers for pressure relief devices subject to 40 CFR 63.165(a) and for pressure relief devices equipped with rupture disks, under the provisions of 40 CFR 63.165(d). [40 CFR 63.181(b)(3)]
  - (iv) Identification of instrumentation systems subject to 40 CFR 63 Subpart H. Individual components in an instrumentation system need not be identified.
  - (v) Identification of screwed connectors subject to 40 CFR 63.174(c)(2). Identification can be by area or grouping as long as the total number within each group or area is recorded.
  - (vi) The following information shall be recorded for each dual mechanical seal system:
    - (1) Design criteria required in 40 CFR 63.163(e)(6)(i), 63.164(e)(2), and 63.173(d)(6)(i) and an explanation of the design criteria; and
    - (2) Any changes to these criteria and the reasons for the changes.
  - (vii) The following information pertaining to all pumps subject to 40 CFR 63.163(j), valves subject to 40 CFR 63.168(h) and (i), agitators subject to 40 CFR 63.173(h) through (j), and connectors subject to 40 CFR 63.174(f) and (g) shall be recorded:
    - (1) Identification of equipment designated as unsafe to monitor, difficult to monitor, or unsafe to inspect and the plan for monitoring or inspecting this equipment.
    - (2) A list of identification numbers for the equipment that is designated as difficult to monitor, an explanation of why the equipment is difficult to monitor, and the planned schedule for monitoring this equipment.
    - (3) A list of identification numbers for connectors that are designated as unsafe to repair and an explanation why the connector is unsafe to repair.

**SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

- (viii) (1) A list of valves removed from and added to the process unit, as described in 40 CFR 63.168(e)(1), if the net credits for removed valves is expected to be used.
  - (2) A list of connectors removed from and added to the process unit, as described in 40 CFR 63.174(i)(1), and documentation of the integrity of the weld for any removed connectors, as required in 40 CFR 63.174(j). This is not required unless the net credits for removed connectors is expected to be used.
- (ix) For any leaks detected as specified in 40 CFR 63.163 and 63.164; 63.168; and 63.172 through 63.174, a weatherproof and readily visible identification, marked with the equipment identification number, shall be attached to the leaking equipment.
- m. For visual inspections, the permittee shall document that the inspection was conducted and the date of the inspection. These records shall be kept for two years [40 CFR 63.181(c)].
- n. When a leak is detected, the following information shall be recorded and kept for two years. [40 CFR 63.181(d)]
  - (i) The instrument and the equipment identification number and the operator name, initials, or identification number.
  - (ii) The date the leak was detected and the date of first attempt to repair the leak.
  - (iii) The date of successful repair of the leak.
  - (iv) Maximum instrument reading measured by Method 21 of 40 CFR part 60, appendix A after it is successfully repaired or determined to be nonrepairable.
  - (v) "Repair delayed" and the reason for the delay if a leak is not repaired within 15 calendar days after discovery of the leak.
    - (1) The permittee may develop a written procedure that identifies the conditions that justify a delay of repair. The written procedures may be included as part of the startup/shutdown/malfunction plan, required by 40 CFR 63.6(e)(3), for the source or may be part of a separate document that is maintained at the plant site. In such cases, reasons for delay of repair may be documented by citing the relevant sections of the written procedure.
    - (2) If delay of repair was caused by depletion of stocked parts, there must be documentation that the spare parts were sufficiently stocked on-site before depletion and the reason for depletion.
  - (vi) Dates of process unit shutdowns that occur while the equipment is unrepaired.
  - (vii) (1) Identification, either by list, location (area or grouping), or tagging of connectors that have been opened or otherwise had the seal broken since the last monitoring period required in 40 CFR 63.174(b), as described in 40 CFR 63.174(c)(1), unless the permittee elects to comply with 63.174(c)(1)(ii).
  - (2) The date and results of monitoring as required in 40 CFR 63.174(c). If identification of connectors that have been opened or

**SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

otherwise had the seal broken is made by location under 40 CFR 63.181(d)(7)(i), then all connectors within the designated location shall be monitored.

- (viii) Copies of the periodic reports as specified in 40 CFR 63.182(d), if records are not maintained on a computerized database capable of generating summary reports from the records.
- o. If the permittee elects to comply with the pressure testing requirements in accordance with **2.c.(xiv) Emission Limitations**, the permittee is exempt from the requirements of paragraphs l, m, n and p of this section. Instead, the permittee shall maintain records as specified in 40 CFR 63.181(e).
- p. The results of compliance tests required for compressors and the dates and results of monitoring following a pressure relief valve pressure release shall be recorded. The results shall include: [40 CFR 63.181(f)]
  - (i) The background level measured during each compliance test.
  - (ii) The maximum instrument reading measured at each piece of equipment during each compliance test.
- q. The permittee shall maintain records required for closed-vent systems and control devices subject to 40 CFR 63.172. [40 CFR 63.181(g)]
  - (i) The design specifications and performance demonstrations specified in 40 CFR 63.181(g)(1)(i) through (g)(1)(iv) shall be retained for the life of the equipment.
    - (1) Detailed schematics, design specifications of the control device, and piping and instrumentation diagrams.
    - (2) The dates and descriptions of any changes in the design specifications.
    - (3) The flare design (i.e., steam-assisted, air-assisted, or non-assisted) and the results of the compliance demonstration required by 40 CFR 63.11(b) of 40 CFR 63 Subpart A.
    - (4) A description of the parameter or parameters monitored, as required in 40 CFR 63.172(e), to ensure that control devices are operated and maintained in conformance with their design and an explanation of why that parameter (or parameters) was selected for the monitoring.
  - (ii) Records of operation of closed-vent systems and control devices, as specified in 40 CFR 63.181(g)(2)(i) through (g)(2)(iii) shall be retained for 2 years.
    - (1) Dates and durations when the closed-vent systems and control devices required in 40 CFR 63.163 through 63.166, and 63.170 are not operated as designed as indicated by the monitored parameters, including periods when a flare pilot light system does not have a flame.
    - (2) Dates and durations during which the monitoring system or monitoring device is inoperative.
    - (3) Dates and durations of start-ups and shutdowns of control devices required in 40 CFR 63.163 through 63.166, and 63.170.



**SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

- (iii) Records of inspections of closed-vent systems subject to the provisions of 40 CFR 63.172, as specified in 40 CFR 63.181(g)(3)(i) and (g)(3)(ii) shall be retained for 2 years.
    - (1) For each inspection conducted in accordance with the provisions of 40 CFR 63.172(f)(1) or (f)(2) during which no leaks were detected, a record that the inspection was performed, the date of the inspection, and a statement that no leaks were detected.
    - (2) For each inspection conducted in accordance with 63.172(f)(1) or (f)(2) during which leaks were detected, the information specified in 40 CFR 63.181(d) shall be recorded.
- r. If the permittee implements any of the quality improvement programs required by 40 CFR 63.175 or 63.176, the records specified in 40 CFR 63.181(h) shall be maintained for a period of the quality improvement plan for the process unit.

**6. Specific Reporting Requirements:**

- a. Refer to **Section B, Group Requirements**.
- b. For equipment subject to 40 CFR 63 Subpart FFFF, the permittee shall submit the following reports:
  - (i) 40 CFR 63.2515(b), Initial Notification – The permittee has fulfilled this requirement through documentation dated March 8, 2004 submitted to U.S. EPA Region IV and the Division.
  - (ii) A notification of performance test at least 60 calendar days before the performance test is scheduled to begin as required in 40 CFR 63.7(b)(1), if applicable. [40 CFR 63.2515(c)]
  - (iii) A Notification of compliance status report containing the information specified in 40 CFR 63.2520(d) no later than 150 days after the compliance date specified in 40 CFR 63.2445.
  - (iv) A Compliance report containing the information specified in 40 CFR 63.2520(e) semiannually according to the requirements in 40 CFR 63.2520(b).
- c. The permittee shall furnish reports as specified in **5. Specific Reporting Requirements**.
- d. Also refer to **Section F.5**.

**Process Vents and Closed Vent Systems**

- e. The permittee shall furnish reports as specified in **5. Specific Reporting Requirements** for the flare (**Section B**, EP F01).
- f. The permittee shall submit, as part of the periodic report: [40 CFR 63.999(c)(2)]
  - (i) The information recorded in 40 CFR 63.998(d)(1)(iii)(B) through (E);
  - (ii) Reports of the times of all periods recorded under 40 CFR 63.998(d)(1)(ii)(A) when the vent stream is diverted from the flare through a bypass line; and
  - (iii) Reports of all times recorded under 40 CFR 63.998(d)(1)(ii)(B) when maintenance is performed in car-sealed valves, when the seal is broken, when the bypass line valve position is changed, or the key for a lock-and-key type configuration has been checked out.

## **SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

### Wastewater Streams

- g. For the Group 2 wastewater stream, the permittee shall submit the information specified in Table 15 of Subpart G of Part 63 as part of the Notification of Compliance. [40 CFR 63.146(b)(1) and (2)]

## **7. Specific Control Equipment Operating Conditions:**

### Process Vents

The flare (EP F01) shall be in operation at all times the emission units that vent to the flare are operating. See **Section B** for EP F01.

## **8. Alternate Operating Scenarios:**

- a. For the occurrences of start-ups at EP R01, R02 or R03, the permittee shall follow the Startup, Shutdown, and Malfunction Plan requirements of 40 CFR 63 Subparts A and FFFF.
- b. For the pipeline equipment subject to 40 CFR 63.2480(a) and Table 6 to Subpart FFFF, the permittee may comply with one of the following requirements.
  - (i) Subpart UU of 40 CFR 63 and the requirements referenced therein, except as specified in §63.2480(b) and (d);
  - (ii) Subpart H of 40 CFR 63 and the requirements referenced therein, except as specified in §63.2480(b) and (d); or
  - (iii) 40 CFR 65, subpart F and the requirements referenced therein, except as specified in § 63.2480(c) and (d).

## SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

### WEDCO AREA

EP	Emission Point Description
<b>W01(--)</b>	<b>Description: 200 Line Transfer and Grinding</b> <u>Maximum Processing Rate:</u> 7,500 lb/hr <u>Construction Date:</u> 1978 <u>Control Device:</u> Main Baghouse, FD-5204, 99.6% control efficiency <u>Construction Date:</u> 1978
01	200 Line Transfer Cyclone, FC-5203
02	200 Line Recycle Cyclone, FC-5205
<b>W02(01)</b>	<b>200 Line Intermediate Grinding/Sizing</b> <u>Maximum Processing Rate:</u> 7,500 lb/hr <u>Construction Date:</u> 1978 <u>Control Device:</u> Screener Feeder Baghouse, FD-5207, 99.6% control efficiency <u>Construction Date:</u> 1978
<b>W04(--)</b>	<b>Description: 250 Line Transfer and Grinding</b> <u>Maximum Processing Rate:</u> 7,500 lb/hr <u>Construction Date:</u> 1978 <u>Control Device:</u> Main Baghouse, FD-5254, 99.6% control efficiency <u>Construction Date:</u> 1978
01	250 Line Transfer Cyclone, FC-5253
02	250 Line Recycle Cyclone, FC-5255
<b>W05(01)</b>	<b>250 Line Intermediate Grinding/Sizing</b> <u>Maximum Processing Rate:</u> 7,500 lb/hr <u>Construction Date:</u> 1978 <u>Control Device:</u> Screener Feeder Baghouse, FD-5257, 99.6% control efficiency <u>Construction Date:</u> 1978
<b>W07(--)</b>	<b>Description: 400 Line Transfer and Grinding</b> <u>Maximum Processing Rate:</u> 7,500 lb/hr <u>Construction Date:</u> 1978 <u>Control Device:</u> Main Baghouse, FD-5404, 99.6% control efficiency <u>Construction Date:</u> 1978
01	400 Line Transfer Cyclone, FC-5403
02	400 Line Recycle Cyclone, FC-5405
<b>W08(01)</b>	<b>400 Line Intermediate Grinding/Sizing</b> <u>Maximum Processing Rate:</u> 7,500 lb/hr <u>Construction Date:</u> 1978 <u>Control Device:</u> Screener Feeder Baghouse, FD-5407, 99.6% control efficiency <u>Construction Date:</u> 1978
<b>W10(01)</b>	<b>600 Line Intermediate Grinding/Sizing</b> <u>Maximum Processing Rate:</u> 10,000 lb/hr <u>Construction Date:</u> 1985 <u>Control Device:</u> 600 Line Transfer Baghouse, FD-5630, 99.6% control efficiency <u>Construction Date:</u> 1985
<b>W11(01)</b>	<b>600 Line Intermediate Grinding/Sizing</b> <u>Maximum Processing Rate:</u> 10,000 lb/hr <u>Construction Date:</u> 1985 <u>Control Device:</u> Recycle Baghouse, FD-5631, 99.6% control efficiency <u>Construction Date:</u> 1985

## SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

EP	Emission Point Description
<b>W12</b>	<b>600 Line Intermediate Grinding/Sizing</b> <u>Maximum Processing Rate:</u> 10,000 lb/hr <u>Construction Date:</u> 1985 <u>Control Device:</u> Screener Feeder Baghouse, FD-5632, 99.6% control efficiency <u>Construction Date:</u> 1985
<b>W14 - W19</b>	<b>Description: Ground Silos #1, #2, #3, #4, #7 and #8</b> <u>Description:</u> Product storage <u>Maximum Processing Rate:</u> 18,000 lb/hr each <u>Construction Date:</u> 1959 <u>Control Device:</u> Silo #1, #2, #3, #4, #7 and #8 Vent Filters, 99.6% control efficiency <u>Construction Date:</u> 1978
W14(01)	Ground Silo #1, FB-5701 <u>Control Device:</u> Silo #1 Vent Filter, FD-5704
W15(01)	Ground Silo #2, FB-5702 <u>Control Device:</u> Silo #2 Vent Filter, FD-5705
W16(01)	Ground Silo #3, FB-5703 <u>Control Device:</u> Silo #3 Vent Filter, FD-5706
W17(01))	Ground Silo #4, FB-5704 <u>Control Device:</u> Silo #4 Vent Filter, FD-5707
W18(01)	Ground Silo #7, FB-5707 <u>Control Device:</u> Silo #7 Vent Filter, FD-5708
W19(01)	Ground Silo #8, FB-5708 <u>Control Device:</u> Silo #8 Vent Filter, FD-5709
<b>W20 - W25</b>	<b>Pre-Grinded Product Silos #9 - #14</b> <u>Description:</u> SAP Area product storage <u>Maximum Processing Rate:</u> 18,000 lb/hr each <u>Construction Date:</u> 1959 <u>Control Device:</u> Silo #9, #10, #11, #12, #13 and #14 Vent Filters, 99.6% control efficiency <u>Construction Date:</u> 1978
W20	Pre-Grinded Product Silo #9, FB-5709 <u>Control Device:</u> Silo #9 Vent Filter, FD-5710
W21(01)	Pre-Grinded Product Silo #10, FB-5710 <u>Control Device:</u> Silo #10 Vent Filter, FD-5711
W22(01)	Pre-Grinded Product Silo #11, FB-5711 <u>Control Device:</u> Silo #11 Vent Filter, FD-5712
W23(01)	Pre-Grinded Product Silo #12, FB-5712 <u>Control Device:</u> Silo #12 Vent Filter, FD-5713
W24(01)	Pre-Grinded Product Silo #13, FB-5713 <u>Control Device:</u> Silo #13 Vent Filter, FD-5714
W25(01)	Pre-Grinded Product Silo #14, FB-5714 <u>Control Device:</u> Silo #14 Vent Filter, FD-5715
<b>W26 - W28</b>	<b>Description: Ground Silos #15 - #17</b> <u>Maximum Processing Rate:</u> 18,000 lb/hr each <u>Construction Date:</u> 1985 <u>Control Device:</u> Silo #15, #16 and #17 Pulse Jet Bin Vent Filters, 99.6% control efficiency <u>Construction Date:</u> 1985
W26(01)	Ground Silo #15, FB-5715 <u>Control Device:</u> Silo #15 Pulse Jet Bin Vent Filter, FD-5739
W27(01)	Ground Silo #16, FB-5716 <u>Control Device:</u> Silo #16 Pulse Jet Bin Vent Filter, FD-5740
W28(01)	Ground Silo #17, FB-5717 <u>Control Device:</u> Silo #17 Pulse Jet Bin Vent Filter, FD-5741

## SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

EP	Emission Point Description
W29(01)	<b>PVOH Bulk Loading - Railcar</b> <u>Maximum Processing Rate:</u> 36,000 lb/hr <u>Construction Date:</u> 1985 <u>Control Device:</u> Bulk Loading Baghouse, FD-5716, 99.6% control efficiency <u>Construction Date:</u> 1985
W30(01)	<b>PVOH Bulk Unloading</b> <u>Maximum Processing Rate:</u> 7,200 lb/hr <u>Construction Date:</u> 1985 <u>Control Device:</u> Bulk Unloading Baghouse, FD-5718, 99.6% control efficiency <u>Construction Date:</u> 1985
W32	<b>Bulk Loading/Unloading Fugitives</b> <u>Maximum Processing Rate:</u> 3,548 lb/hr
W33(01)	<b>Bagging Operation: Filling - Sackmatic, PA-5716</b> <u>Description:</u> Filling Operation <u>Maximum Processing Rate:</u> 900 lb/hr <u>Construction Date:</u> 1978 <u>Control Device:</u> Bagging Machine Dust Baghouse, FE-5713A, 99.6% control efficiency <u>Construction Date:</u> 1978
W34(01)	<b>Bagging Hopper, FB-5723</b> <u>Description:</u> PVOH Filling Operation <u>Maximum Processing Rate:</u> 30,000 lb/hr <u>Construction Date:</u> 1978 <u>Control Device:</u> Bagging Hopper Dust Collector, FD-5759, 99.6% control efficiency <u>Construction Date:</u> 1978
W36	<b>Bagging Area Fugitives</b> <u>Maximum Processing Rate:</u> 30,000 lb/hr
W37 - W38	<b>Description: Bulk Truck Loading Stations</b> <u>Maximum Processing Rate:</u> 100,000 lb/hr total <u>Construction Date:</u> 2003 <u>Control Device:</u> 40" Trailer Mounted Filter Canister, 99.6% control efficiency for PM <u>Construction Date:</u> 2003
W37	North Bulk Truck Loading Station <u>Description:</u> Loading from Silos #1 and #4 and the bagging hopper <u>Maximum Processing Rate:</u> 100,000 lb/hr
W38	South Bulk Truck Loading Station <u>Description:</u> Loading from Silos #15-17 <u>Maximum Processing Rate:</u> 100,000 lb/hr

### **APPLICABLE REGULATIONS:**

This source has elected to accept annual limits in order to preclude the applicability of 401 KAR 51:017, *Prevention of Significant Deterioration of Air Quality* (PSD) for volatile organic compounds and particulate matter.

401 KAR 59:010, *New Process Operations*, applies to each affected facility not subject to another emission standard for particulate matter (PM) in Chapter 59 of 401 KAR commenced on or after July 2, 1975. This rule applies to EP W01, W02, W04, W05, W07, W08, W10, W11, W12 and W14-W30, W33, W34, W37 and W38.

401 KAR 63:020, *Potentially Hazardous Matter or Toxic Substances*, applies to sources which emit or may emit potentially hazardous or toxic substances.

**SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

401 KAR 63:010, *Fugitive Emissions*, applies to sources of fugitive emissions not elsewhere subject to an opacity standard. This rule applies to EP W32 and W36.

**Regulations Not Applicable:**

40 CFR 63 Subpart F, *National Emission Standards for Organic Hazardous Air Pollutants from the Synthetic Organic Chemical Manufacturing Industry*, and related Subparts G and H, are not applicable to the WEDCO Area units, as these units do not produce chemicals listed under Table 1 of 40 CFR 63, Subpart F as a primary product.

40 CFR 63, Subpart FFFF, *National Emission Standards for Hazardous Air Pollutants: Miscellaneous Organic Chemical Manufacturing*, is not applicable to the WEDCO Area units because solid material grinding and storage is not part of a MON process, pursuant to 40 CFR 63.2550 (Definitions).

**State-Origin Applicable Regulations:**

Permit No. VF-03-001, issued on September 5, 2003, Permit No. S-95-198R, issued on June 4, 1998, Permit No. S-97-054, issued on May 20, 1997, Permit No. C-86-172, issued on August 8, 1986, and Permit No. C-84-146, issued on August 21, 1984. See **Section B, Group Requirements**.

**1. Operating Limitations:**

- a. Refer to **Section B, Group Requirements**.
- b. The particulate control devices shall be in operation at all times each emission unit at EP W01, W02, W04, W05, W07, W08, W10, W11, W12, W14-W30, W33, W34, W37 and W38 are operating.

**Compliance Demonstration Method:**

Refer to **Section B, Group Requirements**.

**2. Emission Limitations:**

- a. Refer to **Section B, Group Requirements**.
- b. Pursuant to 401 KAR 59:010, Section 3(2), emissions of particulate matter (PM) from each emission point shall not exceed the values listed below:

<u>Emission Point</u>	<u>Allowable Emission Rate (lb/hr)</u>
W01, W02, W04, W05, W07, W08	8.15 each
W10-W12	9.74 each
W14-W28	14.02 each
W29	21.55
W30	7.94
W33	2.34 each
W34	19.24
W37, W38	32.37 each

- c. Pursuant to 401 KAR 59:010, Section 3(1), emissions shall not equal or exceed 20% opacity from each EP W01, W02, W04, W05, W07, W08, W10, W11, W12, W14-W30, W33, W34, W37 and W38.

**SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

- d. Pursuant to 401 KAR 63:010, Section 3(3), when dust, fumes, gases, mist odorous matter, vapors, or any combination thereof escape from a building or equipment in such a manner and amount as to cause a nuisance or to violate any administrative regulation, the secretary may order that the building or equipment in which processing, handling and storage are done be tightly closed and ventilated in such a way that all air and gases and air or gas-borne material leaving the building or equipment are treated by removal or destruction or air contaminants before discharge to the open air.
- e. Pursuant to 401 KAR 63:020, no owner or operator shall allow any affected facility to emit potentially hazardous matter or toxic substances in such quantities or duration as to be harmful to the health and welfare of humans, animals and plants.

**Compliance Demonstration Method:**

- a. Refer to **Section B, Group Requirements**.
- b. To provide reasonable assurance that the particulate matter emission limitations are being met, the permittee shall monitor the amount of process weight added to each emissions unit. The process weight rate shall be determined by dividing the tons of material added to each emission unit in a calendar month by the total hours the unit operated that month. Average particulate matter (PM) emissions shall be calculated as follows:

$$\text{Controlled PM Emissions} = \text{PR} \times \text{EF} \times (1 - \text{CE}/100)$$

Where: PR = PVOH Production Rate for the emission point (tons/hr)  
EF = Emission Factor (lb PM / ton PVOH produced)  
CE = Control Efficiency (%)

- c. For compliance with the opacity limit, refer to **4. Specific Monitoring Requirements**.
- d. If an emissions unit at EP W01, W02, W04, W05, W07, W08, W10, W11, W12, W14-W30, W33, W34, W37 or W38 is in operation during any period of malfunction of the particulate control device, the permittee shall shut down the affected emission unit until associated repairs are complete and take the necessary corrective actions in accordance with **5.d. Specific Recordkeeping Requirements**.
- e. In order to demonstrate compliance with 401 KAR 63:010, Fugitive Emissions, each affected facility listed above shall be controlled with wet suppression, enclosures, and/or dust collection equipment.
- f. For compliance with 401 KAR 63:020, if the source alters process rates, material formulations, or any other factor that would result in an increase of HAP emissions or the addition of HAP emissions not previously evaluated by the Division, the source shall submit the appropriate application forms pursuant to 401 KAR 52:020, along with air modeling to show that the facility will remain in compliance with 401 KAR 63:020. The source may perform a screening analysis of the potential to emit of methanol, methyl acetate, and any other toxic pollutant

**SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

emissions at the plant and compare it to established benchmarks (i.e. Reference Concentrations (RfCs), Unit Risk Estimates (UREs), as applicable).

**3. Testing Requirements:**

None

**4. Specific Monitoring Requirements:**

- a. Refer to **Section B, Group Requirements**.
- b. The permittee shall also perform the following monitoring:
  - (i) A qualitative visual observation of the opacity of emissions once each calendar week while operating each emission unit at EP W01, W02, W04, W05, W07, W08, W10, W11, W12, W14-W28, W29, W30, W33, W34, W37 and W38. If visible emissions are seen (not including condensed water vapor within the plume), the permittee shall perform an EPA Reference Method 9 test for opacity on the applicable stack emissions within 24 hours of observing visible emissions, and make any necessary repairs to bring the opacity into compliance.
  - (ii) The pressure drop across each dust collector once each calendar week.
  - (iii) The information specified in **5. Specific Recordkeeping Requirements**.
- c. Also refer to **7. Specific Control Equipment Operating Conditions**.

**5. Specific Recordkeeping Requirements:**

- a. Refer to **Section B, Group Requirements**.
- b. The permittee shall maintain visual opacity observation records in accordance with **4.b. Specific Monitoring Requirements**.
- c. The permittee shall maintain records of preventive maintenance and inspections of the particulate control devices in accordance with **7. Specific Control Equipment Operating Conditions**.
- d. The permittee shall record the occurrence, duration, cause and any corrective action taken for each incident when an emission unit at EP W01, W02, W04, W05, W07, W08, W10, W11, W12, W14-W30, W33, W34 W37 or W38 is in operation but its respective particulate control device is not.
- e. All records shall be maintained in accordance with **Section F.2**.

**6. Specific Reporting Requirements:**

- a. Refer to **Section B, Group Requirements**.
- b. The permittee shall furnish reports as specified in **5. Specific Recordkeeping Requirements**.
- c. Also refer to **Section F.5**.

**7. Specific Control Equipment Operating Conditions:**

- a. The particulate control devices shall be in operation at all times each emission unit at EP W01, W02, W04, W05, W07, W08, W10, W11, W12, W14-W30, W33, W34, W37 and W38 are operating.



**SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

- b. Preventive maintenance shall be performed, for all particulate control devices, in accordance with the manufacturers' recommendations. Each device shall be inspected monthly for proper operation of the following:
  - (i) Pulse jet device to release dust cake from bags.
  - (ii) Air flow source and equipment.
  - (iii) Pressure drop measuring system.

**8. Alternate Operating Scenarios:**

None

## SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

### ACETIC ACID RECOVERY (AAR) AREA

EP	Emission Point Description
<b>F01(2-)</b>	<b>Description: East Methyl Acetate (MeAc) Extraction Tower</b> - Separates Mother Liquor from the SAP Unit to Methyl Acetate and Methanol <u>Maximum Processing Rate:</u> 53,000 lb/hr <u>Construction Date:</u> 1996 <u>Control Device:</u> Flare, BA-5000 (see Section B, EP F01)
2A	East MeAc Extraction Tower, DA-5300 HON Group 1 Process Vent, HON Maintenance Wastewater Stream, HON Group 2 Wastewater Stream
2B	East MeAc Extraction Tower Condenser, EA-5301 HON Group 1 process vent, HON Group 2 Wastewater Stream
2C	East MeAc Extraction Tower Vent Condenser, EA-5341 HON Group 1 Process Vent
2D	East MeAc Extraction Tower Reflux Accumulator, FA-5331 <u>Capacity:</u> 2,538 gal HON Bottoms Receiver
<b>A01</b>	<b>East Methyl Acetate (MeAc) Extraction Tower Startups</b> <u>Description:</u> 12 events/yr not to exceed 48 hr/yr total
<b>F01(3-)</b>	<b>Description: West Methyl Acetate (MeAc) Extraction Tower</b> - Separates Mother Liquor from the SAP Unit to Methyl Acetate and Methanol <u>Maximum Processing Rate:</u> 85,000 lb/hr <u>Construction Date:</u> 1996 <u>Control Device:</u> Flare, BA-5000 (see Section B, EP F01)
3A	West MeAc Extraction Tower, DA-5304 HON Group 1 Process Vent, HON Maintenance Wastewater Stream, HON Group 2 Wastewater Stream
3B	West MeAc Extraction Tower Condenser, EA-5313 HON Group 1 Process Vent
3C	West MeAc Extraction Tower Vent Condenser, EA-5339 HON Group 1 Process Vent
3D	West MeAc Extraction Tower Reflux Drum, FA-5309 <u>Capacity:</u> 5,299 gal HON Bottoms Receiver
<b>A02</b>	<b>West Methyl Acetate (MeAc) Extraction Tower Startups</b> <u>Description:</u> 12 events/yr not to exceed 48 hr/yr total
<b>F01(4-)</b>	<b>Description: Aldehyde Tower</b> - Processes MeAc Towers' Overheads (MeAc) <u>Maximum Processing Rate:</u> 120,000 lb/hr <u>Construction Date:</u> 1985 <u>Control Device:</u> Flare, BA-5000 (see Section B, EP F01)
4A	Aldehyde Tower, DA-5302 HON Group 1 Process Vent, HON Maintenance Wastewater Stream, HON Group 2 Wastewater Stream
4B	Aldehyde Tower Condenser, EA-5308 HON Group 1 Process Vent
4C	Aldehyde Tower Reflux Drum, FA-5311 <u>Capacity:</u> 1,018 gallons HON Bottoms Receiver
<b>A03</b>	<b>Aldehyde Tower Startups</b> <u>Description:</u> 12 events/yr not to exceed 48 hr/yr total
<b>F01(5-)</b>	<b>Description: SAP Methanol Tower</b> - Separates MeAc Towers' Bottoms to Methanol and Water <u>Maximum Processing Rate:</u> 100,000 lb/hr <u>Construction Date:</u> 1989 <u>Control Device:</u> Flare, BA-5000 (see Section B, EP F01)

## SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

EP	Emission Point Description
5A	SAP Methanol Tower, DA-5303 HON Group 1 Process Vent, HON Maintenance Wastewater Stream, HON Group 2 Wastewater Stream
5B	Methanol Reboiler, EA-5309A HON Group 1 Process Vent, HON Group 2 Wastewater Stream
	Methanol Reflux Drum, FA-5312 Capacity: 9,000 gallons HON Surge Control Vessel
A04	<b>SAP Methanol Tower Startups</b> Description: 12 events/yr not to exceed 48 hr/yr total
F01(6-)	<b>Description: Crude Acid Tower</b> - Processes Ion Exchange Reactors' Product Stream Maximum Processing Rate: 100,000 lb/hr Construction Date: 1992 Control Device: Flare, BA-5000 (see Section B, EP F01)
6A	Crude Acid Tower, DA-5308 HON Group 1 Process Vent, HON Maintenance Wastewater Stream, HON Group 2 Wastewater Stream
6B	Crude Acid Condenser, EA-5328 HON Surge Control Vessel
6C	Crude Acid Tower Reflux Accumulator, FA-5325 Capacity: 1,183 gal HON Bottoms Receiver
F01(6-)	<b>Description: Three (3) Ion Exchange Reactors</b> - Processes Aldehyde Tower Bottoms to Methanol and Acetic Acid Construction Date: 1992 HON Group 1 Process Vent, HON Group 2 Wastewater Stream
6D	Ion Exchange Reactor, FA-5306A HON Group 1 Process Vent, HON Group 2 Wastewater Stream
6E	Ion Exchange Reactor, FA-5306B HON Group 1 Process Vent, HON Group 2 Wastewater Stream
6F	Ion Exchange Reactor, FA-5306E HON Group 1 Process Vent, HON Group 2 Wastewater Stream
A05	<b>Crude Acid Tower Startups</b> Description: 12 events/yr not to exceed 48 hr/yr total
F01(7-)	<b>Description: Product Acid Tower</b> - Processes Crude Tower Bottoms to Acetic Acid Maximum Processing Rate: 31,600 lb/hr Construction Date: 1985 Control Device: Flare, BA-5000 (see Section B, EP F01)
7A	Product Acid Tower, DA-5309 HON Group 1 Process Vent, HON Maintenance Wastewater Stream, HON Group 2 Wastewater Stream
7B	Product Acid Tower Condenser, EA-5332 HON Group 1 Process Vent
7C	Product Acid Reflux Drum, FA-5328 Capacity: 1,648 gallons HON Bottoms Receiver
7D	Sludge Still, FA-5319 HON Bottoms Receiver
A06	<b>Product Acid Tower Startups</b> Description: 12 events/yr not to exceed 48 hr/yr total
A07	<b>Dilute Acid Tank Condenser</b> , EA-5340

## SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

EP	Emission Point Description
A07(01)	<b>Dilute Acid Tank, FA-5330</b> <u>Capacity:</u> 10,000 gal <u>Maximum Processing Rate:</u> 23 gallons/hr <u>Maximum Throughput:</u> 200,000 gallons/yr <u>Construction Date:</u> 1959 <u>Maximum True Vapor Pressure:</u> 9.5679 psia
A08	<b>Acetic Acid Rundown Tanks (3)</b> <u>Capacity:</u> FA-5322A - 3,000 gal, FA-5322B - 10,000 gal, FA-5322C - 10,000 gal <u>Maximum Processing Rate:</u> 1,800 gallons/hr <u>Maximum Throughput:</u> 31,536,000 gallons/yr (total) <u>Construction Date:</u> 1959 <u>Maximum True Vapor Pressure:</u> 0.2882 psia
A09	<b>AAR Process Unit Fugitives</b> (Approximately 49 Pumps/Agitators, 53 Pressure Relief Valves, 1,975 Valves and 6,237 Connectors)

### **APPLICABLE REGULATIONS:**

This source has elected to accept annual limits in order to preclude the applicability of 401 KAR 51:017, *Prevention of Significant Deterioration of Air Quality* (PSD) for volatile organic compounds.

401 KAR 63:002, Sections 2 and 3(1)(d), which incorporates by reference 40 CFR 63 Subpart F, *National Emission Standards for Organic Hazardous Air Pollutants from the Synthetic Organic Chemical Manufacturing Industry*, applies to the AAR Area units. This rule applies to the maintenance wastewater streams from EP F01(2A), F01(3A), F01(4A), F01(5A), F01(6A), and F01(7A).

401 KAR 63:002, Sections 2 and 3(1)(e), which incorporates by reference 40 CFR 63 Subpart G, *National Emission Standards for Organic Hazardous Air Pollutants from the Synthetic Organic Chemical Manufacturing Industry for Process Vents, Storage Vessels, Transfer Operations, and Wastewater*, applies to the Group 1 process vents at EP F01(2A), F01(2B), F01(2C), F01(3A), F01(3B), F01(3C), F01(4A), F01(4B), F01(5A), F01(5B), F01(6A), F01(6D), F01(6E), F01(6F), F01(7A), and F01(7B); the process wastewater streams from EP F01(2A), F01(2B), F01(3A), F01(4A), F01(5A), F01(5B), F01(6A), F01(6D), F01(6E), F01(6F) and F01(7A).

401 KAR 63:002, Sections 2 and 3(1)(f), which incorporates by reference 40 CFR 63 Subpart H, *National Emission Standards for Organic Hazardous Air Pollutants for Equipment Leaks*, applies to the associated pipeline equipment from the AAR Area units at EP A09; the surge control vessels at EP F01(5) and F01(6B), and the SAP Methanol Tower Methanol Reflux Drum, FA-5312; the bottoms receivers at EP F01(2D), F01(3D), F01(4C), F01(6C), F01(7C) and F01(7D); and the closed vent systems routing vapors to the flare.

### **NON-APPLICABLE REGULATIONS:**

401 KAR 60:005, Sections 2 and 3(1)(q), which incorporates by reference 40 CFR 60, Subpart Kb (40 CFR 60.112b), *Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced after July 23, 1984*, is not applicable to any of the storage tanks, as they were commenced before July 23, 1984, and there are no modification or reconstruction approvals for these units.

**SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

40 CFR 60, Subpart VV (40 CFR 60.480), *Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry*, is not applicable to the AAR Area units, pursuant to 40 CFR 63.160(b)(1), Subpart H.

40 CFR 60, Subpart NNN, *Standards of Performance for Volatile Organic Compound (VOC) Emissions From Synthetic Organic Chemical Manufacturing Industry (SOCMI) Distillation Operations*, is not applicable to the AAR Area units, pursuant to 40 CFR 63.110(d)(4), Subpart G.

40 CFR 60, Subpart RRR, *Standards of Performance for Volatile Organic Compound Emissions from Synthetic Organic Chemical Manufacturing Industry (SOCMI) Reactor Processes*, is not applicable to the AAR Area units, pursuant to 40 CFR 63.110(d)(7), Subpart G.

40 CFR 63 Subpart EEEE, *National Emission Standards for Hazardous Air Pollutants: Organic Liquids Distribution (Non-Gasoline)*, does not apply to the organic liquid distribution of methanol, listed under Table 1 of 40 CFR 63 Subpart EEEE, for the AAR Area units, because these operations are subject to 40 CFR 63, Subparts F, G and H.

**State-Origin Applicable Regulations:**

Permit No. S-95-198R, issued on June 4, 1998, Permit No. S-97-054, issued on May 20, 1997, Permit No. C-86-172, issued on August 8, 1986, and Permit No. C-84-146, issued on August 21, 1984. See **Section B, Group Requirements**.

**1. Operating Limitations:**

- a. Refer to **Section B, Group Requirements**.
- b. The provisions of 40 CFR Part 63, Subpart A - General Provisions, which are incorporated by reference in 401 KAR 63:002 Section 3(a), apply to the AAR Area units. Table 3 to Subpart F of Part 63 specifies the provisions of Subpart A that apply and those that do not apply. [40 CFR 63.103(a)]

**Maintenance Wastewater**

- c. For maintenance wastewaters containing organic HAPs listed in Table 9 of 40 CFR 63 Subpart G, from the AAR Area units, the permittee shall properly manage the wastewater and control organic HAP emissions. [40 CFR 63.105]

**Process Vents**

- d. All Group 1 process vents from the AAR Area units shall be vented to a flare that complies with all applicable requirements of 40 CFR 63.11(b).

**Wastewater Streams**

- e. The permittee shall not discard liquid or solid organic materials with a concentration of greater than 10,000 parts per million of compounds in Table 9 of 40 CFR 63 Subpart G (as determined by analysis of the stream composition, engineering calculations, or process knowledge, according to the provisions of 40 CFR 63.144(b)) from a chemical manufacturing process unit to water or wastewater, unless the receiving stream is managed and treated as a Group 1 wastewater stream. This prohibition does not apply to materials from the following activities: [40 CFR 63.132(f)]
  - (i) Equipment leaks;

**SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

- (ii) Activities included in maintenance or startup/shutdown/malfunction plans;
- (iii) Spills; or
- (iv) Samples of a size not greater than reasonably necessary for the method of analysis that is used.

**Pipeline Equipment, Surge Control Vessels and Bottoms Receivers, and Closed-Vent Systems**

- f. Pursuant to 40 CFR 63.160(c), if a process unit subject to the provisions of 40 CFR 63, subpart H has equipment to which this subpart does not apply, but which is subject to 40 CFR part 60, subpart VV, the permittee may elect to apply this subpart H to all such equipment in the process unit. If the permittee elects this method of compliance, all VOC in such equipment shall be considered, for purposes of applicability and compliance with this subpart, as if it were organic hazardous air pollutant (HAP). Compliance with the provisions of this subpart H, in the manner described in this paragraph, shall be deemed to constitute compliance with 40 CFR part 60, subpart VV.
- g. For the pipeline equipment in organic hazardous air pollutant service, the permittee shall implement a leak detection and repair (LDAR) program containing the following elements:
  - (i) Each piece of pipeline equipment subject to 40 CFR 63 Subpart H shall be identified such that it can be distinguished readily from equipment that is not subject to 40 CFR 63 Subpart H. [40 CFR 63.162(c)]
  - (ii) When a leak is detected as specified in 40 CFR 63.163 and 63.164; 63.168; and 63.172 through 63.174, the permittee shall: [40 CFR 63.162(f)]
    - (1) Clearly identify the leaking equipment.
    - (2) The identification on a valve may be removed after it has been monitored as specified in 40 CFR 63.168(f)(3) and 63.175(e)(7)(i)(D), and no leak has been detected during the follow-up monitoring. If the permittee elects to comply using the provisions of 40 CFR 63.174(c)(1)(i), the identification on a connector may be removed after it is monitored and no leak is detected during that monitoring.
    - (3) The identification which has been placed on equipment determined to have a leak, except for a valve or for a connector that is subject to 40 CFR 63.174(c)(1)(i), may be removed after it is repaired.
  - (iii) Specific standards for each type of pipeline equipment described under **2. Emission Limitations** below.

**Compliance Demonstration Method:**

- a. Refer to **Section B, Group Requirements**.
- b. Refer to **4. Specific Monitoring Requirements** for Maintenance wastewater, Process Vents and Storage Vessels.

**SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**Wastewater Streams

- c. Total annual average concentration shall be determined according to the procedures specified in 40 CFR 63.144(b). Annual average flow rate shall be determined according to the procedures specified in 40 CFR 63.144(c). [40 CFR 63.132(c)]
- d. For a Group 2 wastewater, the permittee shall re-determine group status for each Group 2 stream, as necessary, to determine whether the stream is Group 1 or Group 2 whenever process changes are made that could reasonably be expected to change the stream to a Group 1 stream. Examples of process changes include, but are not limited to, changes in production capacity, production rate, feedstock type, or whenever there is a replacement, removal, or addition of recovery or control equipment. For purposes of this paragraph, process changes do not include: Process upsets; unintentional, temporary process changes; and changes that are within the range on which the original determination was based. [40 CFR 63.132(c)(3)]

Pipeline Equipment, Surge Control Vessels and Bottoms Receivers, and Closed-Vent Systems

- e. Compliance shall be determined by review of the records required by 40 CFR 63.181 and the reports required by 40 CFR 63.182, review of performance test results, and by inspections. [40 CFR 63.162(a)]

**2. Emission Limitations:**Pipeline Equipment, Surge Control Vessels and Bottoms Receivers, and Closed-Vent Systems

- a. Pursuant to 40 CFR 63.170, each surge control vessel and bottoms receiver shall be equipped with a closed-vent system that routes the emissions back to the process or a control device complying with §63.172 or comply with §63.119(b) or (c).
- b. The permittee shall comply with the fugitive equipment leak emissions standards pursuant to 40 CFR 63.160 through 63.182, as applicable. See below for detailed standards for different services:

- (i) Standards: Pumps in light liquid service [40 CFR 63.163]:

- 40 CFR 63.163(a): Implementation and compliance provisions
- 40 CFR 63.163(b): Monitoring requirements, leak detection levels, frequency of monitoring
- 40 CFR 63.163(c): Repair procedures and time frames
- 40 CFR 63.163(d): Procedures to determine percent leaking pumps and quality improvement program requirements
- 40 CFR 63.163(e)-(j): Exemptions for specific types of pumps

- (ii) Standards: Compressors [40 CFR 63.164]

- 40 CFR 63.164(a)-(e): Operational requirements
- 40 CFR 63.164(f): Criteria for leak detection
- 40 CFR 63.164(g): Repair procedures and time frames
- 40 CFR 63.164(h)-(i): Exemptions for specific types of compressors

**SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

- (iii) Standards: Pressure relief devices in gas/vapor service [40 CFR 63.165]:
  - 40 CFR 63.165(a): Operational requirements
  - 40 CFR 63.165(b): Pressure release procedures
  - 40 CFR 63.165(c)-(d): Exemptions for specific types of pressure relief devices
- (iv) Standards: Sampling Connection Systems [40 CFR 63.166]:
  - 40 CFR 63.166(a)-(c): Operational requirements
- (v) Standards: Open-ended valves or lines [40 CFR 63.167]:
  - 40 CFR 63.167(a)-(c): Operational requirements
  - 40 CFR 63.167(d)-(e): Exemptions for specific types of valves
- (vi) Standards: Valves in gas/vapor service and in light liquid service [40 CFR 63.168]:
  - 40 CFR 63.168(a): Operational requirements
  - 40 CFR 63.168(b)-(d): Monitoring requirements and intervals
  - 40 CFR 63.168(e): Procedures to determine percent leaking valves
  - 40 CFR 63.168(f): Leak repair time frames
  - 40 CFR 63.168(g): First attempt repair procedures
  - 40 CFR 63.168(h)-(i): Exemptions for unsafe-to-monitor and difficult-to-monitor valves
- (vii) Standards: Instrumentation systems [40 CFR 63.169]:
  - 40 CFR 63.169(a): Monitoring frequency
  - 40 CFR 63.169(b): Leak detection levels
  - 40 CFR 63.169(c): Leak repair time frames
- (viii) Standards: Surge control vessels and bottoms receivers [40 CFR 63.170]:
  - 40 CFR 63.170: Operational requirements
- (ix) Standards: Delay of repair [40 CFR 63.171]:
  - 40 CFR 63.171: Allowances for delay of repair
- (x) Standards: Closed-vent systems and control devices [40 CFR 63.172]:
  - 40 CFR 63.172(a)-(b): Operational requirements
  - 40 CFR 63.172(d),(m): Control device requirements
  - 40 CFR 63.172(f)-(g): Monitoring requirements
  - 40 CFR 63.172(h)-(i): Repair procedures and time frames
  - 40 CFR 63.172 (j): Operational requirements for bypass lines
  - 40 CFR 63.172(k)-(l): Exemptions for unsafe-to-inspect and difficult-to-inspect closed-vent systems
- (xi) Standards: Delay of repair [40 CFR 63.171]:
  - 40 CFR 63.171: Allowances for delay of repair
- (xii) Standards: Agitators in gas/vapor service and in light liquid service [40 CFR 63.173]:
  - 40 CFR 63.173(a): Operational requirements
  - 40 CFR 63.173(b): Monitoring requirements and intervals
  - 40 CFR 63.173(c): Leak repair time frames
  - 40 CFR 63.173(d)-(g): Exemptions for specific types of agitators
  - 40 CFR 63.173(h)-(j): Exemptions for difficult-to-monitor, inaccessible or unsafe-to-monitor agitators



**SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

- (xiii) Standards: Connectors in gas/vapor service and in light liquid service [40 CFR 63.174]:
  - 40 CFR 63.174(a): Operational requirements
  - 40 CFR 63.174(b): Monitoring requirements and intervals
  - 40 CFR 63.174(c): Procedures for open connectors or connectors with broken seals
  - 40 CFR 63.174(d): Leak repair time frames
  - 40 CFR 63.174(e): Monitoring frequency for repaired connectors
  - 40 CFR 63.174(f)-(h): Exemptions for unsafe-to-monitor, unsafe-to-repair, inaccessible, or ceramic connectors
  - 40 CFR 63.174(i): Procedures to determine percent leaking connectors
  - 40 CFR 63.174(j): Optional credit for removed connectors
- (xiv) Quality improvement program for valves [40 CFR 63.175]: Pursuant to 40 CFR 63.168(d)(1)(ii), in Phase III, the permittee may elect to implement the following quality improvement programs if the percent of leaking valves is equal to or exceeds 2 percent:
  - 40 CFR 63.175(a): Quality improvement program alternatives
  - 40 CFR 63.175(b): Criteria for ending quality improvement programs
  - 40 CFR 63.175(c): Alternatives following achievement of less than 2 percent leaking valves target
  - 40 CFR 63.175(d): Quality improvement program to demonstrate further progress
  - 40 CFR 63.175(e): Quality improvement program of technology review and improvement
- (xv) Quality improvement program for pumps [40 CFR 63.176]: Pursuant to 40 CFR 63.163(d)(2), if, in Phase III, calculated on a 6-month rolling average, the greater of either 10 percent of the pumps in the AAR area or three pumps in the AAR area leak, the permittee shall implement the following quality improvement programs for pumps:
  - 40 CFR 63.176(a): Applicability criteria
  - 40 CFR 63.176(b): Criteria for ending the quality improvement program
  - 40 CFR 63.176(c): Criteria for resumption of the quality improvement program
  - 40 CFR 63.176(d): Quality improvement program elements

**Compliance Demonstration Method:**

Pipeline Equipment, Surge Control Vessels and Bottoms Receivers, and Closed-Vent Systems

Compliance shall be determined by review of the records required by 40 CFR 63.181 and by inspections. [40 CFR 63.162(a)]

**3. Testing Requirements:****Process Vents**

- a. Refer to **3. Testing Requirements** for the flare (**Section B**, EP F01).

**SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**Pipeline Equipment, Surge Control Vessels and Bottoms Receivers, and Closed-Vent Systems

- b. The permittee shall comply with the following test methods and procedures requirements, pursuant to 40 CFR 63.180(a):
- (i) Monitoring shall comply with Method 21 of 40 CFR part 60, appendix A. [40 CFR 63.180(b)(1)]
  - (ii) The detection instrument shall meet the performance criteria of Method 21 of 40 CFR part 60, appendix A, except the instrument response factor criteria in Section 3.1.2(a) of Method 21 shall be for the average composition of the process fluid not each individual VOC in the stream. For process streams that contain nitrogen, water, air, or other inerts which are not organic HAPs or VOCs, the average stream response factor may be calculated on an inert-free basis. The response factor may be determined at any concentration for which monitoring for leaks will be conducted. If no instrument is available at the plant site that will meet the performance criteria, the instrument readings may be adjusted by multiplying by the average response factor of the process fluid, calculated on an inert-free basis. [40 CFR 63.180(b)(2)]
  - (iii) The instrument shall be calibrated before use on each day of its use by the procedures specified in Method 21 of 40 CFR part 60, appendix A. [40 CFR 63.180(b)(3)]
  - (iv) Calibration gases shall be: [40 CFR 63.180(b)(4)]
    - (1) Zero air (less than 10 parts per million of hydrocarbon in air); and
    - (2) Mixtures of methane in air at the concentrations specified in paragraphs 63.180(b)(4)(ii)(A) through (b)(4)(ii)(C). A calibration gas other than methane in air may be used if the instrument does not respond to methane or if the instrument does not meet the performance criteria specified in 40 CFR 63.180(b)(2)(i). In such cases, the calibration gas may be a mixture of one or more of the compounds to be measured in air.
    - (3) The instrument may be calibrated at a higher methane concentration than the concentration specified for that piece of equipment. The concentration of the calibration gas may exceed the concentration specified as a leak by no more than 2,000 parts per million. If the monitoring instrument's design allows for multiple calibration scales, then the lower scale shall be calibrated with a calibration gas that is no higher than 2,000 parts per million above the concentration specified as a leak and the highest scale shall be calibrated with a calibration gas that is approximately equal to 10,000 parts per million. If only one scale on an instrument will be used during monitoring, the permittee need not calibrate the scales that will not be used during that day's monitoring.
  - (v) Monitoring shall be performed when the equipment is in organic HAP service, in use with an acceptable surrogate volatile organic compound

**SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

which is not an organic HAP, or is in use with any other detectable gas or vapor. [40 CFR 63.180(b)(5)]

- (vi) Monitoring data that do not meet the criteria specified in 40 CFR 63.180(b)(1) through (b)(5) may be used to qualify for less frequent monitoring under the provisions in 40 CFR 63.168(d)(2) and (d)(3) or 63.174(b)(3)(ii) or (b)(3)(iii) provided the data meet the following conditions. [40 CFR 63.180(b)(6)]
  - (1) The data were obtained before April 22, 1994.
  - (2) The departures from the criteria specified in 40 CFR 63.180(b)(1) through (b)(5) or from the specified monitoring frequency of 40 CFR 63.168(c) are minor and do not significantly affect the quality of the data. Examples of minor departures are monitoring at a slightly different frequency (such as every six weeks instead of monthly or quarterly), following the performance criteria of section 3.1.2(a) of Method 21 of appendix A of 40 CFR part 60 instead of 40 CFR 63.180(b)(2), or monitoring at a different leak definition if the data would indicate the presence or absence of a leak at the concentration specified in this subpart. Failure to use a calibrated instrument is not considered a minor departure.
- (vii) When equipment is monitored for compliance as required in 40 CFR 63.164(i), 63.165(a), and 63.172(f) or when equipment subject to a leak definition of 500 ppm is monitored for leaks as required by 40 CFR 63 Subpart H, the permittee may elect to adjust or not to adjust the instrument readings for background. If the permittee elects to not adjust instrument readings for background, the permittee shall monitor the equipment according to the procedures specified in 40 CFR 63.180(b)(1) through (b)(4). In such case, all instrument readings shall be compared directly to the applicable leak definition to determine whether there is a leak. If the permittee elects to adjust instrument readings for background, the permittee shall monitor the equipment according to the following procedures. [40 CFR 63.180(c)]
  - (1) The requirements of 40 CFR 63.180(b)(1) through (4) shall apply.
  - (2) The background level shall be determined, using the same procedures that will be used to determine whether the equipment is leaking.
  - (3) The instrument probe shall be traversed around all potential leak interfaces as close to the interface as possible as described in Method 21 of 40 CFR part 60, appendix A.
  - (4) The arithmetic difference between the maximum concentration indicated by the instrument and the background level is compared with 500 parts per million for determining compliance.
- (viii) (1) Each piece of equipment within a process unit that can reasonably be expected to contain equipment in organic HAP service is presumed to be in organic HAP service unless the permittee demonstrates that the piece of equipment is not in organic HAP service. For a piece of equipment to be considered not in organic

**SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

HAP service, it must be determined that the percent organic HAP content can be reasonably expected not to exceed 5 percent by weight on an annual average basis. For purposes of determining the percent organic HAP content of the process fluid that is contained in or contacts equipment, Method 18 of 40 CFR part 60, appendix A shall be used. [40 CFR 63.180(d)]

- (2) (A) The permittee may use good engineering judgment rather than the procedures in 40 CFR 63.180(d)(1) to determine that the percent organic HAP content does not exceed 5 percent by weight. When the permittee and the Division do not agree on whether a piece of equipment is not in organic HAP service, however, the procedures in 40 CFR 63.180(d)(1) shall be used to resolve the disagreement.
- (B) Conversely, the permittee may determine that the organic HAP content of the process fluid does not exceed 5 percent by weight by, for example, accounting for 98 percent of the content and showing that organic HAP is less than 3 percent.
- (3) If the permittee determines that a piece of equipment is in organic HAP service, the determination can be revised after following the procedures in 40 CFR 63.180(d)(1), or by documenting that a change in the process or raw materials no longer causes the equipment to be in organic HAP service.
- (4) Samples used in determining the percent organic HAP content shall be representative of the process fluid that is contained in or contacts the equipment.
- (ix) When a flare is used to comply with 63.172(d), the permittee shall comply with 63.180(e)(1) through (3). The permittee is not required to conduct a performance test to determine percent emission reduction or outlet organic HAP or TOC concentration. [40 CFR 63.180(e)]
  - (1) Conduct a visible emission test using the techniques specified in 40 CFR 63.11(b)(4).
  - (2) Determine the net heating value of the gas being combusted using the techniques in 40 CFR 63.11(b)(6).
  - (3) Determine the exit velocity using the techniques specified in either §63.11(b)(7)(i) (and §63.11(b)(7)(iii), where applicable).

**4. Specific Monitoring Requirements:****Maintenance wastewater**

- a. The permittee shall prepare a description of maintenance procedures for management of wastewaters generated from the emptying and purging of equipment in the process during temporary shutdowns for inspections, maintenance, and repair (i.e., a maintenance-turnaround) and during periods which are not shutdowns (i.e., routine maintenance). The descriptions shall include the following information: [40 CFR 63.105(b)]
  - (i) The process equipment or maintenance tasks that are anticipated to create

**SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

- wastewater during maintenance activities;
- (ii) The procedures that will be followed to properly manage the wastewater and control organic HAP emissions to the atmosphere; and
- (iii) The procedures to be followed when clearing materials from process equipment.
- b. The permittee shall modify and update the information required by 40 CFR 63.105(b) as needed following each maintenance procedure based on the actions taken and the wastewaters generated in the preceding maintenance procedure.
- c. The permittee shall incorporate the procedures described in 40 CFR 63.105(b) and (c) as part of the startup, shutdown, and malfunction plan required under 40 CFR 63.6(e)(3).
- d. The information specified in **5. Specific Recordkeeping Requirements** for Maintenance wastewater.

Process Vents

- e. Refer to **4. Specific Monitoring Requirements** for the flare (**Section B**, EP F01).
- f. For any bypass line between the origin of the gas stream (i.e., at a distillation unit or reactor) and the point where the gas stream reaches the process vent that could divert the gas stream directly to the atmosphere, the permittee of a process vent shall secure the bypass line valve in the non-diverting position with a car-seal. A visual inspection of the seal mechanism shall be performed at least once every month to ensure that the valve is maintained in the non-diverting position and the gas stream is not diverted through the bypass line. Equipment such as low leg drains, high point bleeds, analyzer vents, open-ended valves or lines, and pressure relief valves needed for safety purposes are not subject to this paragraph. [40 CFR 63.114(d)(2)]

Pipeline Equipment, Surge Control Vessels and Bottoms Receivers, and Closed-Vent Systems

- g. Refer to **3. Testing Requirements**.
- h. Fulfill all monitoring requirements per **2. Emission Limitations**.

**5. Specific Recordkeeping Requirements:**

- a. Refer to **Section B, Group Requirements**.
- b. All records shall be kept in accordance with 40 CFR 63.103(c).

Maintenance wastewater

- c. The permittee shall maintain a record of the information required by 40 CFR 63.105(b) and (c) as part of the start-up, shutdown, and malfunction plan required under 40 CFR 63.6(e)(3).

Process Vents

- d. The permittee shall keep the following records up-to-date and readily accessible: [40 CFR 63.118(a)]
  - (i) Records that the monthly visual inspections of the seals has been done,

**SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

- (ii) Records of the duration of all periods when the seal mechanism is broken, the bypass line valve position has changed, and
  - (iii) Records of any car-seal that has broken.
- e. The permittee shall keep records as specified in **5. Specific Recordkeeping Requirements** for the flare (**Section B**, EP F01).

**Wastewater Streams**

- f. For the Group 2 wastewater streams, the permittee shall keep in a readily accessible location the following records. [40 CFR 63.147(b)(8)]
  - (i) Process unit identification and description of the process unit.
  - (ii) Stream identification code.
  - (iii) The concentration of compound(s) in Table 9 of 40 CFR 63 Subpart G, in parts per million, by weight, including documentation of the methodology used to determine concentration.
  - (iv) Flow rate in liter per minute.
  - (v) If the permittee uses process knowledge to determine the annual average concentration of a wastewater stream and/or uses process knowledge to determine the annual average flow rate, the documentation of how process knowledge was used to determine the annual average concentration and/or the annual average flow rate of the wastewater stream. [40 CFR 63.147(f)]
- g. Refer to **4. Specific Monitoring Requirements** for Wastewater Streams.

**Pipeline Equipment, Surge Control Vessels and Bottoms Receivers, and Closed-Vent Systems**

- h. The permittee may comply with the recordkeeping requirements for the Polymerization, Saponification, Polyrectification, and AAR Areas in one recordkeeping system if the system identifies each record by process unit and the program being implemented (e.g., quarterly monitoring, quality improvement) for each type of equipment. All records required by 40 CFR 63.181 shall be maintained in a manner that can be readily accessed at the plant site. [40 CFR 63.181(a)]
- i. The permittee shall maintain all records pertaining to the pipeline equipment required by 40 CFR 63.181(b).
  - (i) (1) A list of identification numbers for equipment (except connectors exempt from monitoring and recordkeeping identified in 40 CFR 63.174 and instrumentation systems) subject to the requirements of this subpart. Connectors need not be individually identified if all connectors in a designated area or length of pipe subject to the provisions of this subpart are identified as a group, and the number of connectors subject is indicated. With respect to connectors, the list shall be complete no later than the completion of the initial survey required by 40 CFR 63.174 (b)(1) or (b)(2).
  - (2) A schedule by process unit for monitoring connectors subject to 40 CFR 63.174(a) and valves subject to 40 CFR 63.168(d).
  - (3) Physical tagging of the equipment to indicate that it is in organic HAP service is not required. Equipment subject to the provisions

**SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

- of this subpart may be identified on a plant site plan, in log entries, or by other appropriate methods.
- (ii)
    - (1) A list of identification numbers for equipment that the permittee elects to equip with a closed-vent system and control device, under the provisions of 40 CFR 63.163(g), 63.164(h), 63.165(c), or 63.173(f).
    - (2) A list of identification numbers for compressors that the permittee elects to designate as operating with an instrument reading of less than 500 parts per million above background, under the provisions of 40 CFR 63.164(i).
    - (3) Identification of surge control vessels or bottoms receivers subject to the provisions 40 CFR 63 Subpart H that the permittee elects to equip with a closed-vent system and control device, under the provisions of 40 CFR 63.170.
  - (iii) A list of identification numbers for pressure relief devices subject to 40 CFR 63.165(a) and for pressure relief devices equipped with rupture disks, under the provisions of 40 CFR 63.165(d). [40 CFR 63.181(b)(3)]
  - (iv) Individual components in an instrumentation system need not be identified.
  - (v) Identification of screwed connectors subject to 40 CFR 63.174(c)(2). Identification can be by area or grouping as long as the total number within each group or area is recorded.
  - (vi) The following information shall be recorded for each dual mechanical seal system:
    - (1) Design criteria required in 40 CFR 63.163(e)(6)(i), 63.164(e)(2), and 63.173(d)(6)(i) and an explanation of the design criteria; and
    - (2) Any changes to these criteria and the reasons for the changes.
  - (vii) The following information pertaining to all pumps subject to 40 CFR 63.163(j), valves subject to 40 CFR 63.168(h) and (i), agitators subject to 40 CFR 63.173(h) through (j), and connectors subject to 40 CFR 63.174(f) and (g) shall be recorded:
    - (1) Identification of equipment designated as unsafe to monitor, difficult to monitor, or unsafe to inspect and the plan for monitoring or inspecting this equipment.
    - (2) A list of identification numbers for the equipment that is designated as difficult to monitor, an explanation of why the equipment is difficult to monitor, and the planned schedule for monitoring this equipment.
    - (3) A list of identification numbers for connectors that are designated as unsafe to repair and an explanation why the connector is unsafe to repair.
  - (viii)
    - (1) A list of valves removed from and added to the process unit, as described in 40 CFR 63.168(e)(1), if the net credits for removed valves is expected to be used.
    - (2) A list of connectors removed from and added to the process unit, as described in 40 CFR 63.174(i)(1), and documentation of the

**SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

integrity of the weld for any removed connectors, as required in 40 CFR 63.174(j). This is not required unless the net credits for removed connectors is expected to be used.

- (ix) For any leaks detected as specified in 40 CFR 63.163 and 63.164; 63.168; and 63.172 through 63.174, a weatherproof and readily visible identification, marked with the equipment identification number, shall be attached to the leaking equipment.
- j. For visual inspections, the permittee shall document that the inspection was conducted and the date of the inspection. These records shall be kept for two years. [40 CFR 63.181(c)]
- k. When a leak is detected, the following information shall be recorded and kept for two years. [40 CFR 63.181(d)]
  - (i) The instrument and the equipment identification number and the operator name, initials, or identification number.
  - (ii) The date the leak was detected and the date of first attempt to repair the leak.
  - (iii) The date of successful repair of the leak.
  - (iv) Maximum instrument reading measured by Method 21 of 40 CFR part 60, appendix A after it is successfully repaired or determined to be nonrepairable.
  - (v) “Repair delayed” and the reason for the delay if a leak is not repaired within 15 calendar days after discovery of the leak.
    - (1) The permittee may develop a written procedure that identifies the conditions that justify a delay of repair. The written procedures may be included as part of the startup/shutdown/malfunction plan, required by 40 CFR 63.6(e)(3), for the source or may be part of a separate document that is maintained at the plant site. In such cases, reasons for delay of repair may be documented by citing the relevant sections of the written procedure.
    - (2) If delay of repair was caused by depletion of stocked parts, there must be documentation that the spare parts were sufficiently stocked on-site before depletion and the reason for depletion.
  - (vi) Dates of process unit shutdowns that occur while the equipment is unrepaired.
  - (vii) (1) Identification, either by list, location (area or grouping), or tagging of connectors that have been opened or otherwise had the seal broken since the last monitoring period required in 40 CFR 63.174(b), as described in 40 CFR 63.174(c)(1), unless the permittee elects to comply with 63.174(c)(1)(ii).
  - (2) The date and results of monitoring as required in 40 CFR 63.174(c). If identification of connectors that have been opened or otherwise had the seal broken is made by location under 40 CFR 63.181(d)(7)(i), then all connectors within the designated location shall be monitored.



**SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

- (viii) Copies of the periodic reports as specified in 40 CFR 63.182(d), if records are not maintained on a computerized database capable of generating summary reports from the records.
- l. The results of compliance tests required for compressors and the dates and results of monitoring following a pressure relief valve pressure release shall be recorded. The results shall include: [40 CFR 63.181(f)]
  - (i) The background level measured during each compliance test.
  - (ii) The maximum instrument reading measured at each piece of equipment during each compliance test.
- m. The permittee shall maintain records required for closed-vent systems and control devices subject to 40 CFR 63.172. [40 CFR 63.181(g)]
  - (i) The design specifications and performance demonstrations specified in 40 CFR 63.181(g)(1)(i) through (g)(1)(iv) shall be retained for the life of the equipment.
    - (1) Detailed schematics, design specifications of the control device, and piping and instrumentation diagrams.
    - (2) The dates and descriptions of any changes in the design specifications.
    - (3) The flare design (i.e., steam-assisted, air-assisted, or non-assisted) and the results of the compliance demonstration required by 40 CFR 63.11(b) of 40 CFR 63 Subpart A.
    - (4) A description of the parameter or parameters monitored, as required in 40 CFR 63.172(e), to ensure that control devices are operated and maintained in conformance with their design and an explanation of why that parameter (or parameters) was selected for the monitoring.
  - (ii) Records of operation of closed-vent systems and control devices, as specified in 40 CFR 63.181(g)(2)(i) through (g)(2)(iii) shall be retained for 2 years.
    - (1) Dates and durations when the closed-vent systems and control devices required in 40 CFR 63.163 through 63.166, and 63.170 are not operated as designed as indicated by the monitored parameters, including periods when a flare pilot light system does not have a flame.
    - (2) Dates and durations during which the monitoring system or monitoring device is inoperative.
    - (3) Dates and durations of start-ups and shutdowns of control devices required in 40 CFR 63.163 through 63.166, and 63.170.
  - (iii) Records of inspections of closed-vent systems subject to the provisions of 40 CFR 63.172, as specified in 40 CFR 63.181(g)(3)(i) and (g)(3)(ii) shall be retained for 2 years.
    - (1) For each inspection conducted in accordance with the provisions of 40 CFR 63.172(f)(1) or (f)(2) during which no leaks were detected, a record that the inspection was performed, the date of the inspection, and a statement that no leaks were detected.

**SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

- (2) For each inspection conducted in accordance with 63.172(f)(1) or (f)(2) during which leaks were detected, the information specified in 40 CFR 63.181(d) shall be recorded.
- n. If the permittee implements any of the quality improvement programs required by 40 CFR 63.175 or 63.176, the records specified in 40 CFR 63.181(h) shall be maintained for a period of the quality improvement plan for the process unit.

**6. Specific Reporting Requirements:**

- a. Refer to **Section B, Group Requirements**.
- b. All reports shall be submitted in accordance with 40 CFR 63.103(d).
- c. For equipment subject to 40 CFR 63 Subparts F, G and H, the permittee shall submit the following reports:
  - (i) 40 CFR 63.182(a)(1), Initial Notification - The permittee has fulfilled this requirement through documentation dated August 17, 1994 submitted to U.S. EPA Region IV and the Division.
  - (ii) 40 CFR 63.182(a)(2), Notification of Compliance Status - The permittee has fulfilled this requirement through documentation dated September 19, 1997 submitted to U.S. EPA Region IV and the Division.
  - (iii) 40 CFR 63.182(a)(3), Periodic Reports - The permittee shall submit to the Division, semiannually, the information required by 40 CFR 63.182(d)(2).
- d. Also refer to **Section F.5**.

Process Vents

- e. The permittee shall submit to the Division Periodic Reports of the information in **5.d. Specific Recordkeeping Requirements** according to the schedule in 40 CFR 63.152. [40 CFR 63.118(f)]
- f. The permittee shall furnish reports as specified in **5. Specific Reporting Requirements** for the flare (**Section B**, EP F01).

Wastewater Streams

- g. For the Group 2 wastewater streams, the permittee shall submit the information specified in Table 15 of Subpart G of Part 63 as part of the Notification of Compliance. [40 CFR 63.146(b)(1) and (2)]

**7. Specific Control Equipment Operating Conditions:**Process Vents

The flare (EP F01) shall be in operation at all times the emission units that vent to the flare are operating. See **Section B** for EP F01.

**8. Alternate Operating Scenarios:**

For the occurrences of start-ups at EP A01, A02, A03, A04, A05 or A06, the permittee shall follow the Startup, Shutdown, and Malfunction Plan requirements of 40 CFR 63 Subparts A, F, G and H.

## SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

### FLARE

EP	Emission Point Description
<b>F01</b>	<b>Flare, BA-5000</b> <b>Description:</b> The flare is used to control hydrocarbon streams from EP F01(2A-2D, 4A-4C, 7A-7D, 10A, 10B, 10D). To comply with 40 CFR 63 Subpart FFFF, the flare will be used to control EP F01(11), F01(12), F01(13), F01(14), F01(15), F01(16), F01(17), F01(18) and F01(19). <u>Construction Date:</u> 1996 <u>Manufacturer:</u> John Zinc <u>Model:</u> EEF-QS-10 Utility Unassisted Flare <u>Supplemental Fuel:</u> Natural Gas <u>Control Efficiency:</u> 98.0% (VOC and organic HAPs) HON and MON Group 1 Process Vent, Group 2 Process Wastewater Stream
<b>F01(1A)</b>	<b>AAR Knockout Pot</b> <u>Control Device:</u> Flare, BA-5000 HON Surge Control Vessel
<b>F01(1B)</b>	<b>Flare Knockout Drum</b> <u>Control Device:</u> Flare, BA-5000 HON Surge Control Vessel

### **APPLICABLE REGULATIONS:**

401 KAR 63:015, *Flares*, applies to the opacity of the flare.

401 KAR 63:002, Sections 2 and 3(1)(a), which incorporates by reference 40 CFR 63 Subpart A, *General Provisions*, applies to the Flare (EP F01) as incorporated by reference in 40 CFR 63, Subparts G and FFFF.

401 KAR 63:002, Sections 2 and 3(1)(e), which incorporates by reference 40 CFR 63 Subpart G, *National Emission Standards for Organic Hazardous Air Pollutants from the Synthetic Organic Chemical Manufacturing Industry for Process Vents, Storage Vessels, Transfer Operations, and Wastewater*, applies to the flare for AAR Area Group 1 process vents.

401 KAR 63:002, Sections 2 and 3(1)(kk), which incorporates by reference 40 CFR 63 Subpart SS, *National Emission Standards for Closed Vent Systems, Control Devices, Recovery Devices and Routing to a Fuel Gas System or a Process*, is applicable pursuant to 40 CFR 63, Subpart FFFF, and applies to the flare for the Group 1 process vents of the Polymerization and Polyrectification Areas.

401 KAR 63:002, Sections 2 and 3(1)(mmm), which incorporates by reference 40 CFR 63 Subpart FFFF, *National Emission Standards for Hazardous Air Pollutants: Miscellaneous Organic Chemical Manufacturing*, applies to the flare for the Group 1 process vents of the Polymerization and Polyrectification Areas.

### **1. Operating Limitations:**

- a. The flare shall be operated at all times when emissions may be vented to it. [40 CFR 63.11(b)(3)]
- b. The flare shall be operated with a flame present at all times. [40 CFR 63.11(b)(5)]
- c. The flare shall be operated in accordance with the net heating value and exit velocity requirements, as specified in **Compliance Demonstration Method** paragraph b. below. [40 CFR 63.11(b)(6) and 63.11(b)(7), 40 CFR 63.116(a)(2) and (3), 40 CFR 63.2450(f)(1)]

## SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

### Compliance Demonstration Method:

- a. For compliance with the **1.a. and 1.b. Operating Limitations**, refer to **4. Specific Monitoring Requirements**.
- b. For compliance with the **1.c. Operating Limitations**, the permittee shall determine flare compliance required in 40 CFR 63.116(a)(2) and 40 CFR 63.9987(b) by complying with one of the following techniques. [40 CFR 63.116(a)(2) and 40 CFR 63.2450(f)(1)]
  - (i) The flare shall have a diameter of 3 inches or greater, is non-assisted, have a hydrogen content of 8.0 percent (by volume) or greater, and is designed for and operated with an exit velocity less than 37.2 m/sec (122 ft/sec) and less than the velocity  $V_{\max}$ , as determined by the following equation: [40 CFR 63.11(b)(6)(i)(A)]

$$V_{\max} = (X_{H_2} - K_1) * K_2$$

Where:

$V_{\max}$  = Maximum permitted velocity, m/sec.

$K_1$  = Constant, 6.0 volume-percent hydrogen.

$K_2$  = Constant, 3.9(m/sec)/volume-percent hydrogen.

$X_{H_2}$  = The volume-percent of hydrogen, on a wet basis, as calculated by using the American Society for Testing and Materials (ASTM) Method D1946–77. (Incorporated by reference in 40 CFR 63.14).

- (ii) The net heating value of the gas being combusted in a flare shall be calculated using the following equation: [40 CFR 63.11(b)(6)(ii) and 40 CFR 63.987(b)(3)(ii)]

$$H_T = K \sum_{i=1}^n C_i * H_i$$

Where:

$H_T$  = Net heating value of the sample, megajoules per standard cubic meter; where the net enthalpy per mole of offgas is based on combustion at 25 °C and 760 millimeters of mercury (30 inches of mercury), but the standard temperature for determining the volume corresponding to one mole is 20 °C;

$K_1$  =  $1.740 \times 10^{-7}$  (parts per million by volume)<sup>-1</sup> (gram-mole per standard cubic meter) (megajoules per kilocalories), where the standard temperature for gram mole per standard cubic meter is 20 °C;

$n$  = number of sample components;

$C_j$  = Concentration of sample component  $j$ , in parts per million by volume on a wet basis, as measured for organics by Method 18 of 40 CFR part 60, appendix A, or by American Society for Testing and Materials (ASTM) D6420–99 (available for purchase from at least one of the following addresses: 100 Barr Harbor Drive, West Conshohocken, PA 19428–2959; or University Microfilms

**SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

International, 300 North Zeeb Road, Ann Arbor, MI 48106) under the conditions specified in 63.997(e)(2)(iii)(D)(I) through (3). Hydrogen and carbon monoxide are measured by ASTM D1946–90; and

$H_j$  = Net heat of combustion of sample component j, kilocalories per gram mole at 25 °C and 760 millimeters of mercury (30 inches of mercury).

- c. The actual exit velocity of the flare shall be determined by dividing by the volumetric flow rate of gas being combusted (in units of emission standard temperature and pressure), as determined by Test Method 2, 2A, 2C, or 2D in appendix A to 40 CFR 60, as appropriate, by the unobstructed (free) cross-sectional area of the flare tip. [40 CFR 63.11(b)(6)(i)(B), 40 CFR 63.11(b)(7)(i) and 40 CFR 63.987(b)(3)(iii)]
- d. The permittee shall also comply with **5.b Specific Recordkeeping Requirements** when complying with **Compliance Demonstration Method 1.b(i)** above. [40 CFR 63.2450(f)(2)]

**2. Emission Limitations:**

- a. Pursuant to 401 KAR 63:015, visible emissions from the flare shall not exceed 20 percent opacity for more than three minutes in any one day.
- b. Pursuant to 40 CFR 63.11(b)(4), the flare shall be operated with be no visible emissions, except for periods not to exceed a total of 5 minutes during any 2 consecutive hours.
- c. Pursuant to 40 CFR 63.170, each surge control vessel at EP F01(1A) and F01(1B) shall be equipped with a closed-vent system that routes the emissions back to the process or a control device complying with §63.172 or comply with §63.119(b) or (c).

**Compliance Demonstration Method:**

- a. For compliance with the visible emissions standards, refer to **4.b. Specific Monitoring Requirements**.
- b. For compliance with the standard for surge control vessels, compliance shall be determined by review of the records required by 40 CFR 63.181 and by inspections. [40 CFR 63.162(a)]

**3. Testing Requirements:**

- a. Pursuant to 40 CFR 63.11(b)(4), the permittee shall conduct a visible emission test by EPA Test Method 22, with a 2 hour observation period. The test shall be performed annually, within 180 days of issuance of the final permit. [40 CFR 63.116(a)]
- b. A flare compliance assessment was conducted September 23, 1997. Pursuant to 40 CFR 63.987(b), as referenced by 40 CFR 63.2450(e)(2), the permittee shall conduct an initial flare compliance assessment, within 150 days after the compliance date specified in 40 CFR 63.2445(b), as specified in 40 CFR 63.2520(d)(1) and 63.2520(d)(2)(ii).

**SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)****4. Specific Monitoring Requirements:**

- a. The permittee shall install, calibrate, maintain, and operate a device (including but not limited to a thermocouple, ultra-violet beam sensor, or infrared sensor) capable of continuously detecting the presence of a pilot flame. This shall be in accordance to manufacturer's specifications or other written procedures that provide adequate assurance that the equipment would reasonably be expected to monitor accurately. [40 CFR 63.114(a)(2) and 40 CFR 63.987(c) and 40 CFR 63.996(c)(1), as referenced by 40 CFR 63.2450(e)]
- b. Pursuant to 40 CFR 63.111 and 40 CFR 63.981, a continuous record means documentation, either in hard copy or computer readable form, of data values measured at least once every 15 minutes.
- c. For the surge control vessels, fulfill all monitoring requirements per **2. Emission Limitations**.

**5. Specific Recordkeeping Requirements:**

- a. The permittee shall keep an up-to-date, readily accessible record of the following data. Pursuant to 40 CFR 63.117(a), this data shall be included in the Notification of Compliance Status report as specified in 40 CFR 63.152(b). Pursuant to 40 CFR 63.998(a)(1)(i), this data shall be included in the flare compliance assessment report as specified in 40 CFR 63.999(a)(2)(iii)(A).
  - (i) Flare design (i.e., steam-assisted, air-assisted, or non-assisted);
  - (ii) All visible emission readings, heat content determinations, flow rate measurements, and exit velocity determinations made during the compliance determination required by 40 CFR 63.116(a); and
  - (iii) All periods during the flare compliance assessment when all pilot flames are absent or, if only the flare flame is monitored, all periods when the flare flame is absent.
- b. When complying with **Operating Limitations**, **Compliance Demonstration Method 1.b(i)**, the permittee shall keep records of the flare diameter, hydrogen content, exit velocity, and maximum permitted velocity and shall include these records in the flare compliance report required in 40 CFR 63.999(a)(2). [40 CFR 63.2450(f)(2)(ii)]
- c. The permittee shall keep the following records up-to-date and readily accessible: [40 CFR 63.118(a) and 40 CFR 63.998(a)(1)(ii) and(iii)]
  - (i) Hourly records of whether the monitor was continuously operating and whether the pilot flame was continuously present during each hour.
  - (ii) Records of the times and duration of all periods during which the pilot flame is absent or the monitor is not operating for each operating day determined according to the procedures specified in 40 CFR 63.152(f).

**6. Specific Reporting Requirements:**

- a. The permittee shall provide the flare compliance assessment notifications and reports as specified in 40 CFR 63.999(a), as referenced by 40 CFR 63.2450(f).
- b. The permittee shall submit to the Division Periodic Reports of the following recorded information according to the schedule in 40 CFR 63.152. [40 CFR 63.118(f)]

**SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

- (i) Reports of the duration of periods when monitoring data is not collected for each excursion caused by insufficient monitoring data as defined in 40 CFR 63.152(c)(2)(ii)(A) and 63.999(c)(6)(i), as referenced by 40 CFR 63.2450(e).
- (ii) Reports of the times and durations of all periods in which the pilot flame was absent, as recorded in **5.c.(ii) Specific Recordkeeping Requirements**.

**7. Specific Control Equipment Operating Conditions:**

The flare shall be in operation at all times the emission units that vent to the flare are operating.

**8. Alternate Operating Scenarios:**

None

## SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

### TANK FARM

EP	Emission Point Description
<b>T01, T09</b>	<b>Methyl Acetate/Methanol Storage Tanks</b> <u>Tank Description</u> : Internal Floating Roof Tanks with primary seal (vapor-mounted) and secondary seal (rim-mounted) <u>Capacity</u> : 110,000 gallons each <u>Maximum Throughput</u> : 22,000,000 gallons/yr each <u>Construction Date</u> : 1959 <u>Maximum True Vapor Pressure</u> : 3.081 psia HON Group 1 Storage Vessels
T01	Methyl Acetate/Methanol Storage Tank, FB-1513
T09	Methyl Acetate/Methanol Storage Tank, FB-5538
<b>F01(16) - F01(17)</b>	<b>Paste Storage Tanks Nests #1 and #2</b> <u>Tank Description</u> : Fixed Roof Tanks for receipt of paste from the Polymerization Area and for feed for SAP Area <u>Capacity</u> : 51,000 gallons each <u>Control Device</u> : Vapor Balancing (varying control efficiency); will vent to Flare, BA-5000 (see Section B, EP F01) on or before the compliance date in 40 CFR 63.2445(b) for compliance with 40 CFR 63, Subpart FFFF <u>Maximum throughput</u> : 60,000,000 gallons/yr as methanol each <u>Construction Date</u> : 1959 <u>Maximum True Vapor Pressure</u> : 10.8542 psia MON Group 1 Storage Tanks
F01(16 A-16D)	Paste Storage Tanks North Nest #1 (4), FB-5501, FB-5502, FB-5503 and FB-5504
F01(17 A-17D)	Paste Storage Tanks South Nest #2 (4), FB-5505, FB-5506, FB-5507 and FB-5508
<b>F01(18 A-18B)</b>	<b>Paste Storage Tanks West Nest #3 (2)</b> , FB-5509 and FB-5510 <u>Tank Description</u> : Fixed Roof Tanks <u>Capacity</u> : 78,800 gallons each <u>Control Device</u> : Venturi Scrubber, FH-5550, 95% control efficiency; will vent to Flare, BA-5000 (see Section B, EP F01) on or before the compliance date in 40 CFR 63.2445(b) for compliance with 40 CFR 63, Subpart FFFF <u>Maximum throughput</u> : 60,000,000 gallons/yr as methanol total <u>Construction Date</u> : 1984 <u>Maximum True Vapor Pressure</u> : 10.8542 psia MON Group 1 Storage Tanks
<b>T05</b>	<b>Methanol Storage Tank</b> , FB-5531 <u>Tank Description</u> : Internal Floating Roof Tank with primary seal (Vapor-mounted) and secondary seal (Rim-mounted) storing "fresh" methanol (95%) and recovered methanol (5%) from the Polymethanol Tower, DA-5103 <u>Capacity</u> : 51,000 gallons <u>Maximum throughput</u> : 3,120,000 gallons/yr <u>Construction Date</u> : 1959 <u>Maximum True Vapor Pressure</u> : 1.3917 psia MON Group 1 Storage Tank



## SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

EP	Emission Point Description
<b>T06</b>	<b>Methanol Saponification Tank System (4)</b> , FB-5532, FB-5533, FB-5534 and FB-5535 <u>Tank Description</u> : Internal Floating Roof Tanks with primary seal (Vapor-mounted) primarily storing recovered methanol from the SAP Methanol Tower (DA-5303) and the Polymethanol Tower (DA-5103) and also storing Mother Liquor. <u>Tank Capacity</u> : 51,000 gallons each <u>Maximum Throughput</u> : 134,028,000 gallons/yr (total) <u>Construction Date</u> : 1959 <u>Maximum True Vapor Pressure</u> : 2.619 psia HON Group 1 Storage Vessels
<b>T07-T08</b>	<b>Mother Liquor Storage Tanks</b> <u>Tank Description</u> : Internal Floating Roof Tank with Primary Seal (Vapor-mounted) and Secondary Seal (Rim-mounted) <u>Capacity</u> : 215,000 gallons each <u>Maximum Throughput</u> : 138,809,600 gallons/yr each <u>Construction Date</u> : 1959 <u>Maximum True Vapor Pressure</u> : 1.9093 psia HON Group 1 Storage Vessels
T07	N. Mother Liquor Storage Tank, FB-5536
T08	S. Mother Liquor Storage Tank, FB-5537
<b>F01(19 A-19C)</b>	<b>Recovered Vinyl Acetate Rework Storage Tanks (3)</b> , FB-5521, FB-5522 and FB-5523 <u>Capacity</u> : 14,800 gallons each <u>Construction Date</u> : 1959 <u>Control Device</u> : Will vent to Flare, BA-5000 (see Section B, EP F01) on or before the compliance date in 40 CFR 63.2445(b) for compliance with 40 CFR 63, Subpart FFFF <u>Operating Scenario #1</u> : Fixed roof tanks storing recovered vinyl acetate from the Vinyl Redistillation Tower (DA-5105) <u>Maximum throughput</u> : 39,420,000 gallons/yr total <u>Maximum True Vapor Pressure</u> : 2.2002 psia <u>Operating Scenario #2</u> : Fixed roof tanks storing stripper overheads (primarily vinyl acetate) from the Vinyl Extraction Tower (DA-5104) during outages <u>Maximum throughput</u> : 355,200 gallons/yr total <u>Maximum True Vapor Pressure</u> : 2.3622 psia MON Group 1 Storage Tanks
<b>T11</b>	<b>Acetic Acid Tanks (4)</b> <u>Tank Description</u> : Fixed Roof Tanks FB-1501 - 71,000 gal, FB-1502 - 110,000 gal, FB-1503 - 204,000 gal, FB-1517/FB-4517 - 450,000 gal <u>Operating Scenario #1</u> : Acetic Acid Storage <u>Maximum Throughput</u> : 31,536,000 gallons/yr <u>Operating Scenario #2</u> : Methyl Acetate storage in FB-1517/FB-4517 <u>Maximum Throughput</u> : 2,250,000 gallons/yr in FB-1517/FB-4517 <u>Maximum True Vapor Pressure</u> : 0.5998 psia <u>Construction Date</u> : 1959 for FB-1501, FB-1502, FB-1503 <u>Construction Date</u> : 1978 for FB-1517/FB-4517
<b>T14</b>	<b>Tank Farm Fugitives</b> (Approximately 23 Pumps/Agitators, 36 Pressure Relief Valves, 537 Valves and 4,155 Connectors)

## SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

EP	Emission Point Description
M11	<b>Off-Spec/Rework Pollution Control Trailer</b> , No. 2284 <u>Description</u> : Splash loading from the processes <u>Tank Capacity</u> : 6,000 gallons <u>Tank ID 104</u> : 390,000 gallons/yr Acetic Acid <u>Tank ID 105</u> : 60,000 gallons/yr Mother Liquor <u>Tank ID 106</u> : 30,000 gallons/yr Vinyl Acetate <u>Tank ID 108</u> : 120,000 gallons/yr Methyl Acetate <u>Construction Date</u> : 1988 MON Group 2 Storage Tank

### APPLICABLE REGULATIONS:

This source has elected to accept annual limits in order to preclude the applicability of 401 KAR 51:017, *Prevention of Significant Deterioration of Air Quality* (PSD) for volatile organic compounds.

401 KAR 60:005, Sections 2 and 3(1)(q), which incorporates by reference 40 CFR 60, Subpart Kb (40 CFR 60.112b), *Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced after July 23, 1984*, is applicable to EP F01(18A)-(18B). After the compliance date of 40 CFR 63 Subpart FFFF, the permittee must also comply with the monitoring, recordkeeping, and reporting requirements in Subpart FFFF.

401 KAR 63:002, Sections 2 and 3(1)(e), which incorporates by reference 40 CFR 63 Subpart G, *National Emission Standards for Organic Hazardous Air Pollutants from the Synthetic Organic Chemical Manufacturing Industry for Process Vents, Storage Vessels, Transfer Operations, and Wastewater*, applies to the storage vessels at EP T01 and T06-T09.

401 KAR 63:002, Sections 2 and 3(1)(f), which incorporates by reference 40 CFR 63 Subpart H, *National Emission Standards for Organic Hazardous Air Pollutants for Equipment Leaks*, applies to the pipeline equipment at EP T14 and the storage vessels at EP T01 and T06-T09.

401 KAR 63:002, Sections 2 and 3(1)(kk), which incorporates by reference 40 CFR 63 Subpart SS, *National Emission Standards for Closed Vent Systems, Control Devices, Recovery Devices and Routing to a Fuel Gas System or a Process*, is applicable pursuant to 40 CFR 63, Subpart FFFF, and applies to closed vent systems and to the flare (EP F01).

401 KAR 63:002, Sections 2 and 3(1)(oo), which incorporates by reference 40 CFR 63 Subpart WW, *National Emission Standards for Storage Vessels (Tanks) – Control Level 2*, is applicable pursuant to 40 CFR 63, Subpart FFFF, and applies to the storage tank at EP T05.

401 KAR 63:002, Sections 2 and 3(1)(mmm), which incorporates by reference 40 CFR 63 Subpart FFFF, *National Emission Standards for Hazardous Air Pollutants: Miscellaneous Organic Chemical Manufacturing*, applies to the Polymerization, Saponification, and Polyrectification Areas, as these areas produce polyvinyl alcohol, listed under Table 1 of 40 CFR 63 Subpart B, *Requirements for Control Technology Determinations for Major Sources in Accordance with Clean Air Act Sections, Sections 112(g) and 112(j)*, as a MON Source Category. 40 CFR 63.2470 applies to the Group 1 storage tanks at EP F01(16), F01(17), F01(18) and F01(19) and the Group 2 storage tank at EP M11. 40 CFR 63.2480 applies to the equipment leaks.

401 KAR 63:020, *Potentially Hazardous Matter or Toxic Substances*, applies to sources which emit or may emit potentially hazardous or toxic substances.

**SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)****NON-APPLICABLE REGULATIONS:**

401 KAR 60:005, Sections 2 and 3(1)(q), which incorporates by reference 40 CFR 60, Subpart Kb (40 CFR 60.112b), *Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced after July 23, 1984*, does not apply to the storage tanks at EP T10 because the storage capacity of each tank is less than the rule applicability threshold of 75 m<sup>3</sup> (19,812 gallons). Excluding F01(18A) and F01(18B), all other storage tanks were commenced before July 23, 1984, and there are no modification or reconstruction approvals for these units.

401 KAR 63:002, Sections 2 and 3(1)(d), which incorporates by reference 40 CFR 63 Subpart F, *National Emission Standards for Organic Hazardous Air Pollutants from the Synthetic Organic Chemical Manufacturing Industry*, does not apply to the storage tanks at EP T11 as these tanks do not store HAPs listed in Table 2 of 40 CFR 63 Subpart F.

401 KAR 63:002, Sections 2 and 3(1)(e), which incorporates by reference 40 CFR 63 Subpart G, *National Emission Standards for Organic Hazardous Air Pollutants from the Synthetic Organic Chemical Manufacturing Industry for Process Vents, Storage Vessels, Transfer Operations, and Wastewater*, is not applicable to the storage tanks at EP F01(16) - F01(19), as these tanks are not part of a chemical manufacturing processing unit that produces chemicals listed under Table 1 of 40 CFR 63, Subpart F as a primary product.

401 KAR 63:002, Sections 2 and 3(1)(f), which incorporates by reference 40 CFR 63, Subpart H, *National Emission Standards for Organic Hazardous Air Pollutants from Equipment Leaks*, is not applicable to the equipment leaks from the storage tanks at EP F01(16) - F01(19), as these tanks are not part of a chemical manufacturing processing unit that produces chemicals listed under Table 1 of 40 CFR 63, Subpart F as a primary product.

401 KAR 63:002, Sections 2 and 3(1)(III), which incorporates by reference 40 CFR 63 Subpart EEEE, *National Emission Standards for Hazardous Air Pollutants: Organic Liquids Distribution (Non-Gasoline)*, does not apply to the organic liquid distribution of methanol and vinyl acetate, listed under Table 1 of 40 CFR 63 Subpart EEEE, for the storage tanks at EP T01, and T06-T09, because these tanks are subject to 40 CFR 63, Subparts F, G and H; and for the storage tanks at EP F01(16) - F01(19), because these tanks are subject to 40 CFR 63, Subpart FFFF.

**State-Origin Applicable Regulations:**

Permit No. S-95-198R, issued on June 4, 1998, Permit No. S-97-054, issued on May 20, 1997, Permit No. C-86-172, issued on August 8, 1986, and Permit No. C-84-146, issued on August 21, 1984. See **Section B, Group Requirements**.

**1. Operating Limitations:**

- a. Refer to **Section B, Group Requirements**.
- b. The provisions of 40 CFR Part 63, Subpart A - General Provisions, which are incorporated by reference in 401 KAR 63:002 Section 3(a), apply to the tanks listed in this section that are subject to Subpart F, G and H. Table 3 to Subpart F of Part 63 specifies the provisions of Subpart A that apply and those that do not apply. [40 CFR 63.103(a)]
- c. The provisions of 40 CFR Part 63, Subpart A - General Provisions, which are incorporated by reference in 401 KAR 63:002 Section 3(a), apply to the tanks listed in this section that is subject to Subpart FFFF. Table 12 to Subpart FFFF of Part 63

**SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

- specifies the provisions of Subpart A that apply and those that do not apply. [40 CFR Part 63.2540]
- d. Until the permittee complies with the provisions of 40 CFR 63, Subpart FFFF, the permittee shall equip the storage tanks at EP F01(18-) with a closed vent system and control device meeting the following specifications: [40 CFR 60.112b(a)(3)]
    - (i) The closed vent system shall be designed to collect all VOC vapors and gases discharged from the storage vessels and operated with no detectable emissions as indicated by an instrument reading of less than 500 ppm above background and visual inspections, as determined in part 60, subpart VV, Sec. 60.485(b).
    - (ii) The control device shall be designed and operated to reduce inlet VOC emissions by 95 percent or greater.
  - e. Pursuant to 40 CFR 63.119(a)(1), for the Group 1 storage vessels at EP T01 and T06-T09 storing a liquid for which the maximum true vapor pressure of the total organic hazardous air pollutants in the liquid is less than 76.6 kilopascals, the permittee shall reduce hazardous air pollutants emissions to the atmosphere either by operating and maintaining a fixed roof and internal floating roof (IFR) in accordance with the requirements in 40 CFR 63.119(b), or equivalent as provided in 40 CFR 63.121.
  - f. For the Group 1 storage vessels at EP T01 and T06-T09, if the permittee elects to use a fixed roof and an IFR to comply with the requirements of 40 CFR 63.119(a)(1), the permittee shall comply with the following requirements. [40 CFR 63.119(b)]
    - (i) The IFR shall be floating on the liquid surface at all times except when the floating roof must be supported by the leg supports during the following periods.
      - (1) During the initial fill.
      - (2) After the vessel has been completely emptied and degassed.
      - (3) When the vessel is completely emptied before being subsequently refilled.
    - (ii) When the floating roof is resting on the leg supports, the process of filling, emptying, or refilling shall be continuous and shall be accomplished as soon as practical. Note: The intent of this paragraph and paragraph 1.e.i. is to avoid having a vapor space between the floating roof and the stored liquid for extended periods. Storage vessels may be emptied for purposes such as routine storage vessel maintenance, inspections, petroleum liquid deliveries, or transfer operations. Storage vessels where liquid is left on walls, as bottom clingage, or in pools due to floor irregularity are considered completely empty.
    - (iii) Each IFR shall be equipped with a closure device between the wall of the storage vessel and the roof edge. The closure device shall consist of a liquid-mounted seal, a metallic shoe seal, or two seals mounted one above the other so that each forms a continuous closure that completely covers the space between the wall of the storage vessel and the edge of the IFR. The lower seal may be vapor-mounted, but both must be continuous seals.

**SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

- (iv) Automatic bleeder vents are to be closed at all times when the roof is floating, except when the roof is being floated off or is being landed on the roof leg supports.
  - (v) Each IFR shall meet the specifications listed in the following paragraphs. [40 CFR 63.119(b)(5)]
    - (1) Each opening in a noncontact IFR except for automatic bleeder vents (vacuum breaker vents) and rim space vents is to provide a projection below the liquid surface.
    - (2) Each opening in the IFR except for leg sleeves, automatic bleeder vents, rim space vents, column wells, ladder wells, sample wells, and stub drains shall be equipped with a cover or lid. The cover or lid shall be equipped with a gasket.
    - (3) Each penetration of the IFR for the purposes of sampling shall be a sample well. Each sample well shall have a slit fabric cover that covers at least 90 percent of the opening.
    - (4) Each automatic bleeder vent shall be gasketed.
    - (5) Each rim space vent shall be gasketed.
    - (6) Each penetration of the IFR that allows for passage of a ladder shall have a gasketed sliding cover.
    - (7) Each penetration of the IFR that allows for passage of a column supporting the fixed roof shall have a flexible fabric sleeve seal or a gasketed sliding cover.
  - (vi) Each cover or lid on any opening in the IFR shall be closed (i.e., no visible gaps), except when the cover or lid must be open for access. Covers on each access hatch and each gauge float well shall be bolted or fastened so as to be air-tight when they are closed. Rim space vents are to be set to open only when the IFR is not floating or when the pressure beneath the rim seal exceeds the manufacturer's recommended setting.
- g. For the Group 1 storage tanks at EP F01(16-) - F01(19-) storing a liquid for which the maximum true vapor pressure of the total organic hazardous air pollutants in the liquid is less than 76.6 kilopascals, the permittee shall reduce total organic HAP emissions by venting emissions through a closed vent system to a flare. [40 CFR 63.2470(a)]
- h. For the Group 1 storage tank at EP T05, equipped with an IFR and storing a liquid for which the maximum true vapor pressure of the total organic hazardous air pollutants in the liquid is less than 76.6 kilopascals, the permittee shall comply with the requirements of 40 CFR 63 Subpart WW to operate and maintain an IFR, according to the following design requirements. [40 CFR 63.2470(a)]
  - (i) For rim seals, the IFR shall be equipped with two seals mounted one above the other. The lower seal may be vapor-mounted. [40 CFR 63.1063(a)(1)(i)]
  - (ii) For deck fittings, the openings through the deck of the floating roof shall be equipped with the following: [40 CFR 63.1063(a)(2)]
    - (1) Each opening except those for automatic bleeder vents (vacuum breaker vents) and rim space vents shall have its lower edge below the surface of the stored liquid.

**SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

- (2) Each opening except those for automatic bleeder vents (vacuum breaker vents), rim space vents, leg sleeves, and deck drains shall be equipped with a deck cover. The deck cover shall be equipped with a gasket between the cover and the deck.
- (3) Each automatic bleeder vent (vacuum breaker vent) and rim space vent shall be equipped with a gasketed lid.
- (4) Each opening for a sample well or deck drain (that empties into the stored liquid) may be equipped with a slit fabric seal that covers at least 90 percent of the opening, instead of a deck cover.
- (5) Each cover on access hatches and gauge float wells shall be designed to be bolted or fastened when closed.
- (6) Each opening for an unslotted guidepole shall be equipped with a pole wiper, and each unslotted guidepole shall be equipped with a gasketed cap on the top of the guidepole.
- (7) Each opening for a slotted guidepole shall be equipped with one of the following control device configurations:
  - (A) A pole wiper and a pole float. The wiper or seal of the pole float shall be at or above the height of the pole wiper.
  - (B) A pole wiper and a pole sleeve.
- (8) If the floating roof does not meet the requirements listed in 40 CFR 63.1063 (a)(2)(i) through (a)(2)(viii) as of the proposal date of 40 CFR 63 Subpart FFFF, these requirements do not apply until the next time the vessel is completely emptied and degassed, or 10 years after November 10, 2003, whichever occurs first.
- (iii) The floating roof shall float on the stored liquid surface at all times, except when the floating roof is supported by its leg supports or other support devices (e.g., hangers from the fixed roof). [40 CFR 63.1063(b)(1)]
- (iv) When the storage vessel is storing liquid, but the liquid depth is insufficient to float the floating roof, the process of filling to the point of refloating the floating roof shall be continuous and shall be performed as soon as practical. [40 CFR 63.1063(b)(2)]
- (v) Each cover over an opening in the floating roof, except for automatic bleeder vents (vacuum breaker vents) and rim space vents, shall be closed at all times, except when the cover must be open for access. [40 CFR 63.1063(b)(3)]
- (vi) Each automatic bleeder vent (vacuum breaker vent) and rim space vent shall be closed at all times, except when required to be open to relieve excess pressure or vacuum, in accordance with the manufacturer's design. [40 CFR 63.1063(b)(4)]
- (vii) Each unslotted guidepole cap shall be closed at all times except when gauging the liquid level or taking liquid samples. [40 CFR 63.1063(b)(5)]

**Closed Vent Systems**

- i. All Group 1 storage tanks at EP F01(16-)-F01(19-) shall be vented to a flare that complies with all applicable requirements of 40 CFR 63.2450(f).

**SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

- j. Pursuant to 40 CFR 63.982(b), as incorporated by reference in 40 CFR Subpart FFFF, the permittee shall comply with the following provisions for the closed vent systems routing the vapors from the Group 1 storage tanks at EP F01(16-)-F01(19-) to the flare: [40 CFR 63.2450(e)(2) and 40 CFR 63.983(a)]
  - (i) Closed vent systems shall be designed and operated to collect the regulated material vapors from the emission points, and to route the collected vapors to a control device. [40 CFR 63.983(a)(1)]
  - (ii) Closed vent systems shall be operated at all times when emissions are vented to, or collected by, them. [40 CFR 63.983(a)(2)]
- k. For EP F01(16-)-F01(19-), except for equipment needed for safety purposes such as pressure relief devices, low leg drains, high point bleeds, analyzer vents, and open-ended valves or lines, the permittee shall comply with the provisions of either of the following paragraphs i. or (ii) below for each closed vent system that contains bypass lines that could divert a vent stream to the atmosphere. [40 CFR 63.983(a)(3)]
  - (i) Properly install, maintain, and operate a flow indicator at the entrance to any bypass line that is capable of taking periodic readings.
  - (ii) Secure the bypass line valve in the non-diverting position with a car-seal or a lock-and-key type configuration.
- l. For EP F01(16-)-F01(19-), if there are visible, audible, or olfactory indications of leaks at the time of the annual visual inspections required by 40 CFR 63.983(b)(1)(i)(B), the permittee shall comply with either of the following procedures. [40 CFR 63.983(d)(1)]
  - (i) Eliminate the leak.
  - (ii) Monitor the equipment according to the procedures in 40 CFR 63.983(c).
- m. For EP F01(16-)-F01(19-), leaks, as indicated by an instrument reading greater than 500 ppm by volume above background or by visual inspections, shall be repaired as soon as practical. [40 CFR 63.983(d)(2)]
  - (i) A first attempt at repair shall be made no later than 5 days after the leak is detected.
  - (ii) Except as provided in 40 CFR 63.983(d)(3) for delay of repair, repairs shall be completed no later than 15 days after the leak is detected or at the beginning of the next introduction of vapors to the system, whichever is later.

**Pipeline Equipment and Closed-Vent Systems**

- n. Pursuant to 40 CFR 63.160 and 40 CFR 63.2480(a) and Table 6 to Subpart FFFF, for the pipeline equipment in organic hazardous air pollutant service, the permittee shall implement a leak detection and repair (LDAR) program in accordance with 40 CFR 63, Subpart H containing the following elements:
  - (i) Each piece of pipeline equipment subject to 40 CFR 63 Subpart H or FFFF shall be identified such that it can be distinguished readily from equipment that is not subject to 40 CFR 63 Subpart H or FFFF. [40 CFR 63.162(c)]

## **SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

- (ii) When a leak is detected as specified in 40 CFR 63.163 and 63.164; 63.168 and 63.169; and 63.172 through 63.174, the permittee shall: [40 CFR 63.162(f)]
  - (1) Clearly identify the leaking equipment.
  - (2) The identification on a valve may be removed after it has been monitored as specified in 40 CFR 63.168(f)(3) and 63.175(e)(7)(i)(D), and no leak has been detected during the follow-up monitoring. If the permittee elects to comply using the provisions of 40 CFR 63.174(c)(1)(i), the identification on a connector may be removed after it is monitored and no leak is detected during that monitoring.
  - (3) The identification which has been placed on equipment determined to have a leak, except for a valve or for a connector that is subject to 40 CFR 63.174(c)(1)(i), may be removed after it is repaired.
- (iii) Specific standards for each type of pipeline equipment described under **2. Emission Limitations.**

### **Compliance Demonstration Method:**

- a. Refer to **Section B, Group Requirements.**
- b. Refer to **4. Specific Monitoring Requirements** for Closed Vent Systems and Storage Vessels.
- c. For the pipeline equipment, compliance shall be determined by review of the records required by 40 CFR 63.181 and the reports required by 40 CFR 63.182, review of performance test results, and by inspections. [40 CFR 63.162(a)]

## **2. Emission Limitations:**

- a. Refer to **Section B, Group Requirements.**
- b. Pursuant to 401 KAR 63:020, no owner or operator shall allow any affected facility to emit potentially hazardous matter or toxic substances in such quantities or duration as to be harmful to the health and welfare of humans, animals and plants.
- c. For the pipeline equipment, the permittee shall comply with the fugitive equipment leak emissions standards, pursuant to 40 CFR 63.160 through 63.182, as applicable. See below for detailed standards for different services:
  - (i) Standards: Pumps in light liquid service [40 CFR 63.163]:
    - 40 CFR 63.163(a): Implementation and compliance provisions
    - 40 CFR 63.163(b): Monitoring requirements, leak detection levels, frequency of monitoring
    - 40 CFR 63.163(c): Repair procedures and time frames
    - 40 CFR 63.163(d): Procedures to determine percent leaking pumps and quality improvement program requirements
    - 40 CFR 63.163(e)-(j): Exemptions for specific types of pumps
  - (ii) Standards: Compressors [40 CFR 63.164]
    - 40 CFR 63.164(a)-(e): Operational requirements
    - 40 CFR 63.164(f): Criteria for leak detection
    - 40 CFR 63.164(g): Repair procedures and time frames



**SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

- 40 CFR 63.164(h)-(i): Exemptions for specific types of compressors
- (iii) Standards: Pressure relief devices in gas/vapor service [40 CFR 63.165]:
  - 40 CFR 63.165(a): Operational requirements
  - 40 CFR 63.165(b): Pressure release procedures
  - 40 CFR 63.165(c)-(d): Exemptions for specific types of pressure relief devices
- (iv) Standards: Sampling Connection Systems [40 CFR 63.166]:
  - 40 CFR 63.166(a)-(b): Operational requirements
  - 40 CFR 63.166(c): Exemptions for specific types of sampling connection systems
- (v) Standards: Open-ended valves or lines [40 CFR 63.167]:
  - 40 CFR 63.167(a)-(c): Operational requirements
  - 40 CFR 63.167(d)-(e): Exemptions for specific types of valves
- (vi) Standards: Valves in gas/vapor service and in light liquid service [40 CFR 63.168]:
  - 40 CFR 63.168(a): Operational requirements
  - 40 CFR 63.168(b)-(d): Monitoring requirements and intervals
  - 40 CFR 63.168(e): Procedures to determine percent leaking valves
  - 40 CFR 63.168(f): Leak repair time frames
  - 40 CFR 63.168(g): First attempt repair procedures
  - 40 CFR 63.168(h): Exemptions for unsafe-to-monitor valves
  - 40 CFR 63.168(i): Exemptions for difficult-to-monitor valves
- (vii) Standards: Instrumentation systems [40 CFR 63.169]:
  - 40 CFR 63.169(a): Monitoring frequency
  - 40 CFR 63.169(b): Leak detection levels
  - 40 CFR 63.169(c): Leak repair time frames
- (viii) Standards: Delay of repair [40 CFR 63.171]:
  - 40 CFR 63.171 Allowances for delay of repair
- (ix) Standards: Closed-vent systems and control devices [40 CFR 63.172]:
  - 40 CFR 63.172(a)-(b): Operational requirements
  - 40 CFR 63.172(d),(m): Control device requirements
  - 40 CFR 63.172(f)-(g): Monitoring requirements
  - 40 CFR 63.172(h)-(i): Repair procedures and time frames
  - 40 CFR 63.172 (j): Operational requirements for bypass lines
  - 40 CFR 63.172(k)-(l): Exemptions for unsafe-to-inspect and difficult-to-inspect closed-vent systems
- (x) Standards: Agitators in gas/vapor service and in light liquid service [40 CFR 63.173]:
  - 40 CFR 63.173(a): Operational requirements
  - 40 CFR 63.173(b): Monitoring requirements and intervals
  - 40 CFR 63.173(c): Leak repair time frames
  - 40 CFR 63.173(d)-(g): Exemptions for specific types of agitators
  - 40 CFR 63.173(h)-(j): Exemptions for difficult-to-monitor, inaccessible or unsafe-to-monitor agitators
- (xi) Standards: connectors in gas/vapor service and in light liquid service.  
Pursuant to 40 CFR 63.2480(b)(4), the permittee may elect to comply

**SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

- with the standards in 40 CFR 63.174 or the standards in 40 CFR 63.169 for connectors in heavy liquid service:
- 40 CFR 63.169(a): Monitoring frequency
  - 40 CFR 63.169(b): Leak detection levels
  - 40 CFR 63.169(c): Leak repair time frames
  - 40 CFR 63.174(a): Operational requirements
  - 40 CFR 63.174(b): Monitoring requirements and intervals
  - 40 CFR 63.174(c): Procedures for open connectors or connectors with broken seals
  - 40 CFR 63.174(d): Leak repair time frames
  - 40 CFR 63.174(e): Monitoring frequency for repaired connectors
  - 40 CFR 63.174(f)-(h): Exemptions for unsafe-to-monitor, unsafe-to-repair, inaccessible, or ceramic connectors
  - 40 CFR 63.174(i): Procedures to determine percent leaking connectors
  - 40 CFR 63.174(j): Optional credit for removed connectors
- (xii) Quality improvement program for valves [40 CFR 63.175]: Pursuant to 40 CFR 63.168(d)(1)(ii), in Phase III, the permittee may elect to implement the following quality improvement programs if the percent of leaking valves is equal to or exceeds 2 percent:
- 40 CFR 63.175(a): Quality improvement program alternatives
  - 40 CFR 63.175(b): Criteria for ending quality improvement programs
  - 40 CFR 63.175(c): Alternatives following achievement of less than 2 percent leaking valves target
  - 40 CFR 63.175(d): Quality improvement program to demonstrate further progress
  - 40 CFR 63.175(e): Quality improvement program of technology review and improvement
- (xiii) Quality improvement program for pumps [40 CFR 63.176]: Pursuant to 40 CFR 63.163(d)(2), if, in Phase III, calculated on a 6-month rolling average, the greater of either 10 percent of the pumps or three pumps in the Polymerization, Saponification, Polyrectification or AAR Areas leak, the permittee shall implement the following quality improvement programs for pumps:
- 40 CFR 63.176(a): Applicability criteria
  - 40 CFR 63.176(b): Criteria for ending the quality improvement program
  - 40 CFR 63.176(c): Criteria for resumption of the quality improvement program
  - 40 CFR 63.176(d): Quality improvement program elements

**Compliance Demonstration Method:**

- a. Refer to **Section B, Group Requirements**.
- b. For compliance with 401 KAR 63:020, if the source alters process rates, material formulations, or any other factor that would result in an increase of HAP emissions or the addition of HAP emissions not previously evaluated by the

**SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

Division, the source shall submit the appropriate application forms pursuant to 401 KAR 52:020, along with air modeling to show that the facility will remain in compliance with 401 KAR 63:020. The source may perform a screening analysis of the potential to emit of methanol, methyl acetate, vinyl acetate, and any other toxic pollutant emissions at the plant and compare it to established benchmarks (i.e. Reference Concentrations (RfCs), Unit Risk Estimates (UREs), as applicable).

- c. For the pipeline equipment, compliance shall be determined by review of the records required by 40 CFR 63.181 and by inspections. [40 CFR 63.162(a)]

**3. Testing Requirements:**

- a. Refer to **3. Testing Requirements** for the flare (**Section B**, EP F01).
- b. Until the permittee complies with the provisions of 40 CFR 63, Subpart FFFF, for the storage tanks at EP T04, equipped with a closed vent system and control device (other than a flare), the permittee is exempt from Sec. 60.8 of the General Provisions and shall operate the closed vent system and control device and monitor the parameters of the closed vent system and control device in accordance with the operating plan submitted to the Administrator in accordance with 40 CFR 60.113b(c)(1), unless the plan was modified by the Division during the review process. In this case, the modified plan applies. [40 CFR 113b(c)(2)]
- c. For EP T05, pursuant to 40 CFR 63.1063(c)(1), IFRs shall be inspected as specified in 40 CFR 63.1063(d)(1) before the initial filling of the storage vessel. Subsequent inspections shall be performed as specified in 40 CFR 63.1063(c)(1)(i) or (c)(1)(ii):
  - (i) At least once per year as specified in 40 CFR 63.1063(d)(2); and [40 CFR 63.1063(c)(1)(i)(A)]
  - (ii) Each time the storage vessel is completely emptied and degassed, or every 10 years, whichever occurs first, the IFR shall be inspected as specified in 40 CFR 63.1063(d)(1); or [40 CFR 63.1063(c)(1)(i)(B)]
  - (iii) IFRs with two rim seals may be inspected as specified in 40 CFR 63.1063(d)(1) each time the storage vessel is completely emptied and degassed, or every 5 years, whichever occurs first. [40 CFR 63.1063(c)(1)(ii)]
- d. For the pipeline equipment, the permittee shall comply with the following test methods and procedures requirements, pursuant to 40 CFR 63.180(a):
  - (i) Monitoring shall comply with Method 21 of 40 CFR part 60, appendix A. [40 CFR 63.180(b)(1)]
  - (ii) The detection instrument shall meet the performance criteria of Method 21 of 40 CFR part 60, appendix A, except the instrument response factor criteria in Section 3.1.2(a) of Method 21 shall be for the average composition of the process fluid not each individual VOC in the stream. For process streams that contain nitrogen, water, air, or other inerts which are not organic HAPs or VOCs, the average stream response factor may be calculated on an inert-free basis. The response factor may be determined at any concentration for which monitoring for leaks will be conducted. If no instrument is available at the plant site that will meet the performance

**SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

criteria, the instrument readings may be adjusted by multiplying by the average response factor of the process fluid, calculated on an inert-free basis. [40 CFR 63.180(b)(2)]

- (iii) The instrument shall be calibrated before use on each day of its use by the procedures specified in Method 21 of 40 CFR part 60, appendix A. [40 CFR 63.180(b)(3)]

- (iv) Calibration gases shall be: [40 CFR 63.180(b)(4)]

- (1) Zero air (less than 10 parts per million of hydrocarbon in air); and

- (2) Mixtures of methane in air at the concentrations specified in paragraphs 63.180(b)(4)(ii)(A) through (b)(4)(ii)(C). A calibration gas other than methane in air may be used if the instrument does not respond to methane or if the instrument does not meet the performance criteria specified in 40 CFR 63.180(b)(2)(i). In such cases, the calibration gas may be a mixture of one or more of the compounds to be measured in air.

- (3) The instrument may be calibrated at a higher methane concentration than the concentration specified for that piece of equipment. The concentration of the calibration gas may exceed the concentration specified as a leak by no more than 2,000 parts per million. If the monitoring instrument's design allows for multiple calibration scales, then the lower scale shall be calibrated with a calibration gas that is no higher than 2,000 parts per million above the concentration specified as a leak and the highest scale shall be calibrated with a calibration gas that is approximately equal to 10,000 parts per million. If only one scale on an instrument will be used during monitoring, the permittee need not calibrate the scales that will not be used during that day's monitoring.

- (v) Monitoring shall be performed when the equipment is in organic HAP service, in use with an acceptable surrogate volatile organic compound which is not an organic HAP, or is in use with any other detectable gas or vapor. [40 CFR 63.180(b)(5)]

- (vi) Monitoring data that do not meet the criteria specified in 40 CFR 63.180(b)(1) through (b)(5) may be used to qualify for less frequent monitoring under the provisions in 40 CFR 63.168(d)(2) and (d)(3) or 63.174(b)(3)(ii) or (b)(3)(iii) provided the data meet the following conditions. [40 CFR 63.180(b)(6)]

- (1) The data were obtained before April 22, 1994.

- (2) The departures from the criteria specified in 40 CFR 63.180(b)(1) through (b)(5) or from the specified monitoring frequency of 40 CFR 63.168(c) are minor and do not significantly affect the quality of the data. Examples of minor departures are monitoring at a slightly different frequency (such as every six weeks instead of monthly or quarterly), following the performance criteria of section 3.1.2(a) of Method 21 of appendix A of 40 CFR part 60 instead of 40 CFR 63.180(b)(2), or monitoring at a different leak

**SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

definition if the data would indicate the presence or absence of a leak at the concentration specified in this subpart. Failure to use a calibrated instrument is not considered a minor departure.

- (vii) When equipment is monitored for compliance as required in 40 CFR 63.164(i), 63.165(a), and 63.172(f) or when equipment subject to a leak definition of 500 ppm is monitored for leaks as required by 40 CFR 63 Subpart H, the permittee may elect to adjust or not to adjust the instrument readings for background. If the permittee elects to not adjust instrument readings for background, the permittee shall monitor the equipment according to the procedures specified in 40 CFR 63.180(b)(1) through (b)(4). In such case, all instrument readings shall be compared directly to the applicable leak definition to determine whether there is a leak. If the permittee elects to adjust instrument readings for background, the permittee shall monitor the equipment according to the following procedures. [40 CFR 63.180(c)]
  - (1) The requirements of 40 CFR 63.180(b)(1) through (4) shall apply.
  - (2) The background level shall be determined, using the same procedures that will be used to determine whether the equipment is leaking.
  - (3) The instrument probe shall be traversed around all potential leak interfaces as close to the interface as possible as described in Method 21 of 40 CFR part 60, appendix A.
  - (4) The arithmetic difference between the maximum concentration indicated by the instrument and the background level is compared with 500 parts per million for determining compliance.
- (viii) (1) Each piece of equipment within a process unit that can reasonably be expected to contain equipment in organic HAP service is presumed to be in organic HAP service unless the permittee demonstrates that the piece of equipment is not in organic HAP service. For a piece of equipment to be considered not in organic HAP service, it must be determined that the percent organic HAP content can be reasonably expected not to exceed 5 percent by weight on an annual average basis. For purposes of determining the percent organic HAP content of the process fluid that is contained in or contacts equipment, Method 18 of 40 CFR part 60, appendix A shall be used. [40 CFR 63.180(d)]
  - (2) (A) The permittee may use good engineering judgment rather than the procedures in 40 CFR 63.180(d)(1) to determine that the percent organic HAP content does not exceed 5 percent by weight. When the permittee and the Division do not agree on whether a piece of equipment is not in organic HAP service, however, the procedures in 40 CFR 63.180(d)(1) shall be used to resolve the disagreement.
  - (B) Conversely, the permittee may determine that the organic HAP content of the process fluid does not exceed 5 percent by weight by, for example, accounting for 98 percent of the

**SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

- content and showing that organic HAP is less than 3 percent.
- (3) If the permittee determines that a piece of equipment is in organic HAP service, the determination can be revised after following the procedures in 40 CFR 63.180(d)(1), or by documenting that a change in the process or raw materials no longer causes the equipment to be in organic HAP service.
  - (4) Samples used in determining the percent organic HAP content shall be representative of the process fluid that is contained in or contacts the equipment.
- (ix) When a flare is used to comply with 40 CFR 63.172(d), the permittee shall comply with §63.180(e)(1) through (3). The permittee is not required to conduct a performance test to determine percent emission reduction or outlet organic HAP or TOC concentration. [40 CFR 63.180(e)]
- (1) Conduct a visible emission test using the techniques specified in 40 CFR 63.11(b)(4).
  - (2) Determine the net heating value of the gas being combusted using the techniques in 40 CFR 63.11(b)(6).
  - (3) Determine the exit velocity using the techniques specified in either 63.11(b)(7)(i) (and §63.11(b)(7)(iii), where applicable).

**4. Specific Monitoring Requirements:**

- a. Refer to **Section B, Group Requirements.**
- b. The permittee shall also perform the monitoring specified in **5. Specific Recordkeeping Requirements.**
- c. For the Group 1 storage vessels at EP T01 and T06-T09, to demonstrate compliance with 40 CFR 63.119(b), the permittee shall comply with the following requirements in accordance with 40 CFR 63.120(a):
  - (i) The permittee shall visually inspect the IFR, the primary seal, and the secondary seal, by performing either the inspection required by paragraphs (1) or (2) and (3) below. [40 CFR 63.120(a)(3)]
    - (1) Visually inspect the IFR, the primary seal, the secondary seal, gaskets, slotted membranes, and sleeve seals (if any) each time the storage vessel is emptied and degassed and at least once every 5 years; or
    - (2) Visually inspect the IFR and the secondary seal through manholes and roof hatches on the fixed roof at least once every 12 months after initial fill, or at least once every 12 months, and
    - (3) Visually inspect the IFR, the primary seal, the secondary seal, gaskets, slotted membranes, and sleeve seals (if any) each time the vessel is emptied and degassed and at least once every 10 years.
  - (ii) If during the inspections required by paragraph c.(i)(2), the IFR is not resting on the surface of the liquid inside the storage vessel and is not resting on the leg supports; or there is liquid on the floating roof; or the seal is detached; or there are holes or tears in the seal fabric; or there are visible gaps between the seal and the wall of the storage vessel, the

**SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

- permittee shall repair the items or empty and remove the storage vessel from service within 45 calendar days. If this failure cannot be repaired within 45 calendar days and if the vessel cannot be emptied within 45 calendar days, the permittee may utilize up to 2 extensions of up to 30 additional calendar days each. Documentation of a decision to utilize an extension shall include a description of the failure, shall document that alternate storage capacity is unavailable, and shall specify a schedule of actions that will ensure that the control equipment will be repaired or the vessel will be emptied as soon as practical. [40 CFR 63.120(a)(4)]
- (iii) Except as provided in c.(iv), for all the inspections required by c.(i)(1) and c.(i)(3), the permittee shall notify the Division in writing at least 30 calendar days prior to the refilling of each storage vessel to afford the Division the opportunity to have an observer present. [40 CFR 63.120(a)(5)]
  - (iv) If the inspection required by c.(i)(1) and c.(i)(3) is not planned and the permittee could not have known about the inspection 30 calendar days in advance of refilling the vessel, the permittee shall notify the Division at least 7 calendar days prior to the refilling of the storage vessel. Notification may be made by telephone and immediately followed by written documentation demonstrating why the inspection was unplanned. Alternatively, the notification including the written documentation may be made in writing and sent so that it is received by the Division at least 7 calendar days prior to refilling. [40 CFR 63.120(a)(6)]
  - (v) If, during the inspections required by c.(i)(1) and c.(i)(3), the IFR has defects; or the primary seal has holes, tears, or other openings in the seal or the seal fabric; or the secondary seal has holes, tears, or other openings in the seal or the seal fabric; or the gaskets no longer close off the liquid surface from the atmosphere; or the slotted membrane has more than 10 percent open area, the permittee shall repair the items as necessary so that none of the conditions specified in this paragraph exist before refilling the storage vessel with organic HAP. [40 CFR 63.120(a)(7)]
- d. Until the permittee complies with the provisions of 40 CFR 63, Subpart FFFF, for the storage tanks at EP F01(18-), refer to **7. Specific Control Equipment Operating Conditions.**
  - e. For EP F01(16-)-F01(19-), refer to **4. Specific Monitoring Requirements** for the flare (**Section B**, F01).
  - f. For EP T05, pursuant to 40 CFR 63.1063(d), inspections shall be conducted as specified in 40 CFR 63.1063(d)(1) through (d)(3), as applicable. If the floating roof fails an inspection, the owner or operator shall comply with the repair requirements of 40 CFR 63.1063(e).
    - (i) Floating roof inspections shall be conducted by visually inspecting the floating roof deck, deck fittings, and rim seals from within the storage vessel. The inspection may be performed entirely from the top side of the floating roof, as long as there is visual access to all deck components specified in 40 CFR 63.1063(a). Any of the conditions described in 40

**SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

CFR 63.1063(d)(1)(i) through (d)(1)(v) constitutes inspection failure. [40 CFR 63.1063(d)(1)]

- (1) Stored liquid on the floating roof.
  - (2) Holes or tears in the primary or secondary seal.
  - (3) Floating roof deck, deck fittings, or rim seals that are not functioning as designed (as specified in 40 CFR 63.1063(a)).
  - (4) Failure to comply with the operational requirements of 40 CFR 63.1063(b).
  - (5) Gaps of more than 0.32 centimeters (1/8 inch) between any deck fitting gasket, seal, or wiper (required by 40 CFR 63.1063(a)) and any surface that it is intended to seal.
- (ii) Tank-top inspections of the IFR shall be conducted by visually inspecting the floating roof deck, deck fittings, and rim seal through openings in the fixed roof. Any of the conditions described in 40 CFR 63.1063(d)(1)(i) through (d)(1)(iv) constitutes inspection failure. Identification of holes or tears in the rim seal is required only for the seal that is visible from the top of the storage vessel. [40 CFR 63.1063(d)(2)]
- (iii) Conditions causing inspection failures under 40 CFR 63.1063(d) shall be repaired as specified:
- (1) If the inspection is performed while the storage vessel is not storing liquid, repairs shall be completed before the refilling of the storage vessel with liquid. [40 CFR 63.1063(e)(1)]
  - (2) If the inspection is performed while the storage vessel is storing liquid, repairs shall be completed or the vessel removed from service within 45 days. If a repair cannot be completed and the vessel cannot be emptied within 45 days, the owner or operator may use up to 2 extensions of up to 30 additional days each. Documentation of a decision to use an extension shall include a description of the failure, shall document that alternate storage capacity is unavailable, and shall specify a schedule of actions that will ensure that the control equipment will be repaired or the vessel will be completely emptied as soon as practical. [40 CFR 63.1063(e)(2)]

**Closed Vent Systems**

- g. Except for any closed vent systems that are designated as unsafe or difficult to inspect as provided in 40 CFR 63.983(b)(2) and (3), the permittee shall comply with the following requirements for each closed vent system. [40 CFR 63.983(b)(1)(i)]
- (i) Conduct an initial inspection according to the procedures in 40 CFR 63.983(c); and
  - (ii) Conduct annual inspections for visible, audible, or olfactory indications of leaks.
- h. For each bypass line, the permittee shall comply with either of the following requirements. [40 CFR 63.983(b)(4)]
- (i) If a flow indicator is used, take a reading at least once every 15 minutes.



**SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

- (ii) If the bypass line valve is secured in the non-diverting position, visually inspect the seal or closure mechanism at least once every month to verify that the valve is maintained in the non-diverting position, and the vent stream is not diverted through the bypass line.

Pipeline Equipment

- i. For the pipeline equipment, refer to **3. Testing Requirements**.
- j. For the pipeline equipment, fulfill all monitoring requirements per **2. Emission Limitations**.

**5. Specific Recordkeeping Requirements:**

- a. Refer to **Section B, Group Requirements**.
- b. For the equipment subject to 40 CFR 63, Subparts F, G and H, all records shall be kept in accordance with 40 CFR 63.103(c).
- c. All records shall be maintained in accordance with **Section F.2**.
- d. Until the permittee complies with the provisions of 40 CFR 63, Subpart FFFF, for the storage tanks at EP T04, the permittee shall keep the following records and furnish reports as required. Unless specified, the permittee shall keep copies of all reports and records required by this condition for at least 2 years. [40 CFR 60.115b and 40 CFR 60.116b]
  - (i) A copy of the operating plan. This record shall be kept for the life of the control device. [40 CFR 60.115b(c)(1)]
  - (ii) A record of the measured values of the parameters monitored in accordance with 40 CFR 60.113b(c)(2).
  - (iii) The dimension of the affected storage vessels and an analysis showing the capacity of the storage vessels. These records shall be kept for the life of the storage tank. [40 CFR 60.116b(b)]
  - (iv) A record of the VOL stored, the period of storage, and the maximum true vapor pressure of that VOL during the respective storage period for affected storage vessels which have a design capacity greater than 39,890 gallons (151 m<sup>3</sup>) storing a liquid with a maximum true vapor pressure greater than or equal to 0.5 psia (3.5 kPa). [40 CFR 60.116b(c)]
  - (v) Records of preventive maintenance and inspections of the particulate control devices in accordance with **7. Specific Control Equipment Operating Conditions**, in accordance with **Section F.2**.
- e. For the storage tanks at EP T04 and M11, the permittee shall keep the following applicable records in accordance with 40 CFR 63.2525:
  - (i) Each applicable record required by 40 CFR 63 Subpart A and in referenced subparts F, G, SS, and WW of 40 CFR 63. [40 CFR 63.2525(a)]
  - (ii) Records of each operating scenario as specified: [40 CFR 63.2525(b)]
    - (1) An identification of storage tanks.
    - (2) The applicable control requirements of 40 CFR 63 Subpart FFFF, including the level of required control, and for vents, the level of control for each vent.

**SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

- (3) The control device or treatment process used, as applicable, including a description of operating and/or testing conditions for any associated control device.
  - (4) The process vents, and storage tanks (including those from other processes) that are simultaneously routed to the control device or treatment process(s).
  - (5) The applicable monitoring requirements of this subpart and any parametric level that assures compliance for all emissions routed to the control device or treatment process.
  - (6) Calculations and engineering analyses required to demonstrate compliance.
  - (7) For reporting purposes, a change to any of these elements not previously reported, except for 63.2525(b)(5), constitutes a new operating scenario.
- (iii) In the SSMP required by 40 CFR 63.6(e)(3), the permittee is not required to include Group 2 emission points, unless those emission points are used in an emissions average. [40 CFR 63.103(c)(3), 40 CFR 63.2525(j)]
  - (iv) For equipment leaks, the SSMP requirement is limited to control devices and is optional for other equipment. [40 CFR 63.2525(j)]

**Closed Vent Systems**

- f. The permittee shall keep records as specified in **5. Specific Recordkeeping Requirements** for the flare (**Section B**, EP F01).
- g. For the closed vent systems, the permittee shall record the following information. [40 CFR 63.998(d)(1)]
  - (i) The identification of all parts of the closed vent system that are designated as unsafe or difficult to inspect, an explanation of why the equipment is unsafe or difficult to inspect, and the plan for inspecting the equipment required by 40 CFR 63.983(b)(2)(ii) or (iii).
  - (ii) The information specified in either 63.998(d)(1)(ii)(A) or (B), as applicable, for each closed vent system that contains bypass lines that could divert a vent stream away from the flare and to the atmosphere. [40 CFR 63.998(d)(1)(ii)]
    - (1) Hourly records of whether the flow indicator specified under 40 CFR 63.983(a)(3)(i) was operating and whether a diversion was detected at any time during the hour, as well as records of the times of all periods when the vent stream is diverted from the flare or the flow indicator is not operating; or
    - (2) Where a seal mechanism is used to comply with 40 CFR 63.983(a)(3)(ii), hourly records of flow are not required. In such cases, the permittee shall record that the monthly visual inspection of the seals or closure mechanisms has been done, and shall record the occurrence of all periods when the seal mechanism is broken, the bypass line valve position has changed, or the key for a lock-and-key type lock has been checked out, and records of any car-seal that has been broken.

**SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

- (iii) The following information, when a leak is detected as specified in 40 CFR 63.983(d)(2). These records shall be kept for 5 years. [40 CFR 63.998(d)(1)(iii)]
  - (1) The instrument and equipment identification number and the operator name, initials, or identification number.
  - (2) The date the leak was detected and the date of the first attempt to repair the leak.
  - (3) The date of successful repair of the leak.
  - (4) The maximum instrument reading measured by the procedures in 40 CFR 63.983(c) after the leak is successfully repaired or determined to be nonrepairable.
  - (5) "Repair delayed" and the reason for the delay if a leak is not repaired within 15 days after discovery of the leak. The permittee may develop a written procedure that identifies the conditions that justify a delay of repair. In such cases, reasons for delay of repair may be documented by citing the relevant sections of the written procedure.
  - (6) Copies of the Periodic Reports as specified in 40 CFR 63.999(c), if records are not maintained on a computerized database capable of generating summary reports from the records.
- (iv) For each instrumental or visual inspection conducted in accordance with 63.983(b)(1) during which no leaks are detected, a record that the inspection was performed, the date of the inspection, and a statement that no leaks were detected. [40 CFR 63.998(d)(iv)]
- h. For the storage vessels at EP T01 and T06-T09, the permittee shall keep readily accessible records showing the dimensions of the storage vessel and an analysis showing the capacity of the storage vessel. This record shall be kept as long as the storage vessel retains Group 1 or Group 2 status and is in operation. [40 CFR 63.123(a)]
- i. For the storage tanks at EP T01 and T06-T09, an owner or operator who elects to comply with 63.119(b) shall keep a record that each inspection required by 40 CFR 63.120(a) was performed. [40 CFR 63.123(c)]
- j. For the storage tanks at EP T01 and T06-T09, an owner or operator who elects to utilize an extension in emptying a storage vessel in accordance with 63.120 (a)(4) shall keep in a readily accessible location, the documentation specified in 40 CFR 63.120 (a)(4). [40 CFR 63.123(g)]
- k. For the storage tanks at EP F01(16-)-F01(19-), a record shall be kept for as long as the liquid is stored of the dimensions of the storage vessel, an analysis of the capacity of the storage vessel, and an identification of the liquid stored. [40 CFR 63.1065(a)]
- l. For EP T05, the permittee shall keep the following records for at least 5 years. [40 CFR 63.1065(a)]
  - (i) If the floating roof passes inspection, a record shall be kept that includes the information specified in 40 CFR 63.1065(b)(1)(i) and (b)(1)(ii). If the floating roof fails inspection, a record shall be kept that includes the

**SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

- information specified in 40 CFR 63.1065(b)(1)(i) through (b)(1)(v). [40 CFR 63.1065(b)(1)]
- (1) Identification of the storage vessel that was inspected. [40 CFR 63.1065(b)(1)(i)]
  - (2) The date of the inspection. [40 CFR 63.1065(b)(1)(ii)]
  - (3) A description of all inspection failures. [40 CFR 63.1065(b)(1)(iii)]
  - (4) A description of all repairs and the dates they were made. [40 CFR 63.1065(b)(1)(iv)]
  - (5) The date the storage vessel was removed from service, if applicable. [40 CFR 63.1065(b)(1)(v)]
- (ii) The permittee shall keep a record of the date when a floating roof is set on its legs or other support devices. The permittee shall also keep a record of the date when the roof was refloated, and the record shall indicate whether the process of refloating was continuous. [40 CFR 63.1065(c)]
  - (iii) An owner or operator who elects to use an extension in accordance with 40 CFR 63.1063(e)(2) or 63.1063(c)(2)(iv)(B) shall keep the documentation required by those paragraphs. [40 CFR 63.1065(d)]
- m. For the pipeline equipment, the permittee may comply with the recordkeeping requirements for the equipment in the Polymerization, Saponification, Polyrectification, and AAR Areas in one recordkeeping system if the system identifies each record by process unit and the program being implemented (e.g., quarterly monitoring, quality improvement) for each type of equipment. All records required by 40 CFR 63.181 shall be maintained in a manner that can be readily accessed at the plant site. [40 CFR 63.181(a)]
  - n. The permittee shall maintain all records pertaining to the pipeline equipment required by 40 CFR 63.181(b).
    - (i)
      - (1) A list of identification numbers for equipment (except instrumentation systems) subject to the requirements of this subpart. [40 CFR 63.181(b)(1)(i)]
      - (2) A schedule by process unit for monitoring connectors subject to 40 CFR 63.174(a) and valves subject to 40 CFR 63.168(d).
      - (3) Physical tagging of the equipment to indicate that it is in organic HAP service is not required. Equipment subject to the provisions of this subpart may be identified on a plant site plan, in log entries, or by other appropriate methods.
    - (ii)
      - (1) A list of identification numbers for equipment that the permittee elects to equip with a closed-vent system and control device, under the provisions of 40 CFR 63.163(g), 63.164(h), 63.165(c), or 63.173(f). [40 CFR 63.181(b)(2)(i)]
      - (2) A list of identification numbers for compressors that the permittee elects to designate as operating with an instrument reading of less than 500 parts per million above background, under the provisions of 40 CFR 63.164(i).
    - (iii) A list of identification numbers for pressure relief devices subject to 40 CFR 63.165(a) and for pressure relief devices equipped with rupture disks, under the provisions of 40 CFR 63.165(d). [40 CFR 63.181(b)(3)]

**SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

- (iv) Individual components in an instrumentation system need not be identified.
- (v) Identification of screwed connectors subject to 40 CFR 63.174(c)(2). Identification can be by area or grouping as long as the total number within each group or area is recorded.
- (vi) The following information shall be recorded for each dual mechanical seal system:
  - (1) Design criteria required in 40 CFR 63.163(e)(6)(i), 63.164(e)(2), and 63.173(d)(6)(i) and an explanation of the design criteria; and
  - (2) Any changes to these criteria and the reasons for the changes.
- (vii) The following information pertaining to all pumps subject to 40 CFR 63.163(j), valves subject to 40 CFR 63.168(h) and (i), agitators subject to 40 CFR 63.173(h) through (j), and connectors subject to 40 CFR 63.174(f) and (g) shall be recorded:
  - (1) Identification of equipment designated as unsafe to monitor, difficult to monitor, or unsafe to inspect and the plan for monitoring or inspecting this equipment.
  - (2) A list of identification numbers for the equipment that is designated as difficult to monitor, an explanation of why the equipment is difficult to monitor, and the planned schedule for monitoring this equipment.
  - (3) A list of identification numbers for connectors that are designated as unsafe to repair and an explanation why the connector is unsafe to repair.
- (viii)
  - (1) A list of valves removed from and added to the process unit, as described in 40 CFR 63.168(e)(1), if the net credits for removed valves is expected to be used.
  - (2) A list of connectors removed from and added to the process unit, as described in 40 CFR 63.174(i)(1), and documentation of the integrity of the weld for any removed connectors, as required in 40 CFR 63.174(j). This is not required unless the net credits for removed connectors is expected to be used.
- (ix) For any leaks detected as specified in 40 CFR 63.163 and 63.164; 63.168; and 63.172 through 63.174, a weatherproof and readily visible identification, marked with the equipment identification number, shall be attached to the leaking equipment.
- o. For visual inspections, the permittee shall document that the inspection was conducted and the date of the inspection. These records shall be kept for two years. [40 CFR 63.181(c)]
- p. When a leak is detected, the following information shall be recorded and kept for two years. [40 CFR 63.181(d)]
  - (i) The instrument and the equipment identification number and the operator name, initials, or identification number.
  - (ii) The date the leak was detected and the date of first attempt to repair the leak.
  - (iii) The date of successful repair of the leak.

**SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

- (iv) Maximum instrument reading measured by Method 21 of 40 CFR part 60, appendix A after it is successfully repaired or determined to be nonrepairable.
- (v) “Repair delayed” and the reason for the delay if a leak is not repaired within 15 calendar days after discovery of the leak.
  - (1) The permittee may develop a written procedure that identifies the conditions that justify a delay of repair. The written procedures may be included as part of the startup/shutdown/malfunction plan, required by 40 CFR 63.6(e)(3), for the source or may be part of a separate document that is maintained at the plant site. In such cases, reasons for delay of repair may be documented by citing the relevant sections of the written procedure.
  - (2) If delay of repair was caused by depletion of stocked parts, there must be documentation that the spare parts were sufficiently stocked on-site before depletion and the reason for depletion.
- (vi) Dates of process unit shutdowns that occur while the equipment is unrepaired.
- (vii)
  - (1) Identification, either by list, location (area or grouping), or tagging of connectors that have been opened or otherwise had the seal broken since the last monitoring period required in 40 CFR 63.174(b), as described in 40 CFR 63.174(c)(1), unless the permittee elects to comply with 63.174(c)(1)(ii).
  - (2) The date and results of monitoring as required in 40 CFR 63.174(c). If identification of connectors that have been opened or otherwise had the seal broken is made by location under 40 CFR 63.181(d)(7)(i), then all connectors within the designated location shall be monitored.
- (viii) Copies of the periodic reports as specified in 40 CFR 63.182(d), if records are not maintained on a computerized database capable of generating summary reports from the records.
- q. The results of compliance tests required for compressors and the dates and results of monitoring following a pressure relief valve pressure release shall be recorded. The results shall include: [40 CFR 63.181(f)]
  - (i) The background level measured during each compliance test.
  - (ii) The maximum instrument reading measured at each piece of equipment during each compliance test.
- r. The permittee shall maintain records required for closed-vent systems and control devices subject to 40 CFR 63.172. [40 CFR 63.181(g)]
  - (i) The design specifications and performance demonstrations specified in 40 CFR 63.181(g)(1)(i) through (g)(1)(iv) shall be retained for the life of the equipment.
    - (1) Detailed schematics, design specifications of the control device, and piping and instrumentation diagrams.
    - (2) The dates and descriptions of any changes in the design specifications.

**SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

- (3) The flare design (i.e., steam-assisted, air-assisted, or non-assisted) and the results of the compliance demonstration required by 40 CFR 63.11(b) of 40 CFR 63 Subpart A.
    - (4) A description of the parameter or parameters monitored, as required in 40 CFR 63.172(e), to ensure that control devices are operated and maintained in conformance with their design and an explanation of why that parameter (or parameters) was selected for the monitoring.
  - (ii) Records of operation of closed-vent systems and control devices, as specified in 40 CFR 63.181(g)(2)(i) through (g)(2)(iii) shall be retained for 2 years.
    - (1) Dates and durations when the closed-vent systems and control devices required in 40 CFR 63.163 through 63.166, and 63.170 are not operated as designed as indicated by the monitored parameters, including periods when a flare pilot light system does not have a flame.
    - (2) Dates and durations during which the monitoring system or monitoring device is inoperative.
    - (3) Dates and durations of start-ups and shutdowns of control devices required in 40 CFR 63.163 through 63.166, and 63.170.
  - (iii) Records of inspections of closed-vent systems subject to the provisions of 40 CFR 63.172, as specified in 40 CFR 63.181(g)(3)(i) and (g)(3)(ii) shall be retained for 2 years.
    - (1) For each inspection conducted in accordance with the provisions of 40 CFR 63.172(f)(1) or (f)(2) during which no leaks were detected, a record that the inspection was performed, the date of the inspection, and a statement that no leaks were detected.
    - (2) For each inspection conducted in accordance with 40 CFR 63.172(f)(1) or (f)(2) during which leaks were detected, the information specified in 40 CFR 63.181(d) shall be recorded.
- s. If the permittee implements any of the quality improvement programs required by 40 CFR 63.175 or 63.176, the records specified in 40 CFR 63.181(h) shall be maintained for a period of the quality improvement plan for the process unit.

**6. Specific Reporting Requirements:**

- a. Refer to **Section B, Group Requirements**.
- b. For the equipment subject to 40 CFR 63 Subparts F, G and H, all reports shall be submitted in accordance with 40 CFR 63.103(d).
- c. For equipment subject to 40 CFR 63 Subparts F, G and H, the permittee shall submit the following reports:
  - (i) 40 CFR 63.182(a)(1), Initial Notification - The permittee has fulfilled this requirement through documentation dated August 17, 1994 submitted to U.S. EPA Region IV and the Division.
  - (ii) 40 CFR 63.182(a)(2), Notification of Compliance Status - The permittee has fulfilled this requirement through documentation dated September 19, 1997 submitted to U.S. EPA Region IV and the Division.

**SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

- (iii) 40 CFR 63.182(a)(3), Periodic Reports - The permittee shall submit to the Division, semiannually, the information required by 40 CFR 63.182(d)(2).
- d. For equipment subject to 40 CFR 63 Subpart FFFF, the permittee shall submit the following reports:
  - (i) 40 CFR 63.2515(b), Initial Notification – The permittee has fulfilled this requirement through documentation dated March 8, 2004 submitted to U.S. EPA Region IV and the Division.
  - (ii) A notification of performance test at least 60 calendar days before the performance test is scheduled to begin as required in 40 CFR 63.7(b)(1), if applicable. [40 CFR 63.2515(c)]
  - (iii) A Notification of compliance status report containing the information specified in 40 CFR 63.2520(d) no later than 150 days after the compliance date specified in 40 CFR 63.2445.
  - (iv) A Compliance report containing the information specified in 40 CFR 63.2520(e) semiannually according to the requirements in 40 CFR 63.2520(b).
- e. The permittee shall furnish reports as specified in **5. Specific Recordkeeping Requirements**.
- f. Also refer to **Section F.5**.
- g. For the storage vessels at EP T01 and T06-T09, the permittee shall submit the following reports. [40 CFR 63.122(a)]
  - (i) 40 CFR 63.151(b), Initial Notification - The permittee has fulfilled this requirement through documentation dated August 17, 1994 submitted to U.S. EPA Region IV and the Division.
  - (ii) 40 CFR 63.152(b), Notification of Compliance Status - The permittee has fulfilled this requirement through documentation dated September 19, 1997 submitted to U.S. EPA Region IV and the Division.
  - (iii) 40 CFR 63.152(c), Periodic Reports.
- h. For the storage vessels at EP T01 and T06-T09, an owner or operator who elects to comply with 63.119(b) by using a fixed roof and an internal floating roof shall submit, as part of the Periodic Report required under 40 CFR 63.152(c), the results of each inspection conducted in accordance with 63.120(a) in which a failure is detected in the control equipment. [40 CFR 63.122(d)]
  - (i) For vessels for which annual inspections are required under 40 CFR 63.120(a)(3)(ii), the following specifications and requirements apply.
    - (1) A failure is defined as any time in which the internal floating roof is not resting on the surface of the liquid inside the storage vessel and is not resting on the leg supports; or there is liquid on the floating roof; or the seal is detached from the internal floating roof; or there are holes, tears, or other openings in the seal or seal fabric; or there are visible gaps between the seal and the wall of the storage vessel.
    - (2) Except as provided in h.i.3., each Periodic Report shall include the date of the inspection, identification of each storage vessel in which a failure was detected, and a description of the failure. The





**SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

documentation may be made in writing and sent so that it is received by the Division at least 7 days before the inspection.

- (ii) The permittee shall submit a copy of the inspection record (required in 40 CFR 63.1065) when inspection failures occur.
- (iii) An owner or operator who elects to use an extension in accordance with 63.1063(e)(2) or 63.1063(c)(2)(iv)(B) shall submit the documentation required by those paragraphs.

**Closed Vent Systems**

- l. The permittee shall furnish reports as specified in **5. Specific Reporting Requirements** for the flare (**Section B**, EP F01).
- m. The permittee shall submit, as part of the periodic report: [40 CFR 63.999(c)(2)]
  - (i) The information recorded in 40 CFR 63.998(d)(1)(iii)(B) through (E);
  - (ii) Reports of the times of all periods recorded under 40 CFR 63.998(d)(1)(ii)(A) when the vent stream is diverted from the flare through a bypass line; and
  - (iii) Reports of all times recorded under 40 CFR 63.998(d)(1)(ii)(B) when maintenance is performed in car-sealed valves, when the seal is broken, when the bypass line valve position is changed, or the key for a lock-and-key type configuration has been checked out.

**7. Specific Control Equipment Operating Conditions:**

- a. The flare (EP F01) shall be in operation at all times the emission units that vent to the flare are operating. See **Section B** for EP F01.
- b. Until the permittee complies with the provisions of 40 CFR 63, Subpart FFFF, for the storage tanks at EP F01(18-), the venturi scrubber shall be in operation at all times the storage tanks at EP F01(18-) are in operation.
- c. Until the permittee complies with the provisions of 40 CFR 63, Subpart FFFF, for the storage tanks at EP F01(18-), preventive maintenance shall be performed, for the venturi scrubber, in accordance with the manufacturers' recommendations.
- d. Until the permittee complies with the provisions of 40 CFR 63, Subpart FFFF, for the storage tanks at EP F01(18-), the flow rate of the scrubbing liquid of the venture scrubber shall be maintained within the range recommended by the manufacturer or established during the most recent stack test.

**8. Alternate Operating Scenarios:**

For the pipeline equipment subject to 40 CFR 63.2480(a) and Table 6 to Subpart FFFF, the permittee may comply with one of the following requirements.

- a. Subpart UU of 40 CFR 63 and the requirements referenced therein, except as specified in §63.2480(b) and (d);
- b. Subpart H of 40 CFR 63 and the requirements referenced therein, except as specified in §63.2480(b) and (d); or
- c. 40 CFR 65, subpart F and the requirements referenced therein, except as specified in § 63.2480(c) and (d).

## SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

### LOADING AREA

EP	Emission Point Description
M04	<b>Acetic Acid Loading Area – Railcar</b> <u>Operating Scenario #1</u> : 15,000 gal/hr Acetic Acid (131,400,000 gal/year) <u>Operating Scenario #2</u> : 15,000 gal/hr Methyl Acetate (131,400,000 gal/year) <u>Control Device</u> : Vapor recovery system, 75% control efficiency HON Group 2 Transfer Rack
M05	<b>Acetic Acid Loading Area – Tank Truck</b> <u>Operating Scenario #1</u> : 4,050 gal/hr Acetic Acid (35,478,000 gal/year) <u>Operating Scenario #2</u> : 4,050 gal/hr Methyl Acetate (35,478,000 gal/year) HON Group 2 Transfer Rack
M06	<b>Methanol Unloading Area – Railcar</b> <u>Maximum Transfer Rate</u> : 2,964,000 gallons/year MON Group 2 Transfer Rack
M12	<b>Loading Area Fugitives</b> (Approximately 4 Agitators/Pumps, 85 Valves and 300 Connectors)

### APPLICABLE REGULATIONS:

401 KAR 63:002, Sections 2 and 3(1)(e), which incorporates by reference 40 CFR 63 Subpart G, *National Emission Standards for Organic Hazardous Air Pollutants from the Synthetic Organic Chemical Manufacturing Industry for Process Vents, Storage Vessels, Transfer Operations, and Wastewater*, applies to the transfer operations at EP M04 and M05.

401 KAR 63:002, Sections 2 and 3(1)(f), which incorporates by reference 40 CFR 63 Subpart H, *National Emission Standards for Organic Hazardous Air Pollutants for Equipment Leaks*, applies to the pipeline equipment from the transfer operations at EP M04 and M05.

401 KAR 63:002, Sections 2 and 3(1)(mmm), which incorporates by reference 40 CFR 63 Subpart FFFF, *National Emission Standards for Hazardous Air Pollutants: Miscellaneous Organic Chemical Manufacturing*, applies to the Polymerization, Saponification, and Polyrectification Areas, as these areas produce polyvinyl alcohol, listed under Table 1 of 40 CFR 63 Subpart B, *Requirements for Control Technology Determinations for Major Sources in Accordance with Clean Air Act Sections, Sections 112(g) and 112(j)*, as a MON Source Category. 40 CFR 63.2475 applies to the transfer rack at EP M06. 40 CFR 63.2480 applies to the equipment leaks at EP M12.

401 KAR 63:020, *Potentially Hazardous Matter or Toxic Substances*, applies to sources which emit or may emit potentially hazardous or toxic substances.

### NON-APPLICABLE REGULATIONS:

401 KAR 63:002, Sections 2 and 3(1)(e), which incorporates by reference 40 CFR 63 Subpart G, *National Emission Standards for Organic Hazardous Air Pollutants from the Synthetic Organic Chemical Manufacturing Industry for Process Vents, Storage Vessels, Transfer Operations, and Wastewater*, is not applicable to the equipment leaks from the transfer rack at EP M06, as this rack is not part of a chemical manufacturing processing unit that produces chemicals listed under Table 1 of 40 CFR 63, Subpart F as a primary product.

401 KAR 63:002, Sections 2 and 3(1)(f), which incorporates by reference 40 CFR 63, Subpart H, *National Emission Standards for Organic Hazardous Air Pollutants for Equipment Leaks*, is not applicable to the equipment leaks from the transfer rack at EP M06, as this rack is not part

**SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

of a chemical manufacturing processing unit that produces chemicals listed under Table 1 of 40 CFR 63, Subpart F as a primary product.

401 KAR 63:002, Sections 2 and 3(1)(III), which incorporates by reference 40 CFR 63 Subpart EEEE, *National Emission Standards for Hazardous Air Pollutants: Organic Liquids Distribution (Non-Gasoline)*, does not apply to the organic liquid distribution of methanol and vinyl acetate, listed under Table 1 of 40 CFR 63 Subpart EEEE, for the transfer racks at M04 or M05, because these operations are subject to 40 CFR 63, Subparts F, G and H; and for the transfer rack at EP M06, because this operation is subject to 40 CFR 63, Subpart FFFF.

**1. Operating Limitations:**

- a. The provisions of 40 CFR Part 63, Subpart A - General Provisions, which are incorporated by reference in 401 KAR 63:002 Section 3(a), apply to the equipment listed in this section. Table 3 to Subpart F of Part 63 specifies the provisions of Subpart A that apply and those that do not apply to owners and operators of sources subject to Subparts F, G and H of Part 63. [40 CFR 63.103(a)]
- b. The provisions of 40 CFR Part 63, Subpart A - General Provisions, which are incorporated by reference in 401 KAR 63:002 Section 3(a), apply to the equipment listed in this section that is subject to Subpart FFFF. Table 12 to Subpart FFFF of Part 63 specifies the provisions of Subpart A that apply and those that do not apply. [40 CFR 63.2540]
- c. Pursuant to 40 CFR 63.2480(a) and Table 6 to Subpart FFFF, and 40 CFR 63, Subpart H, for the pipeline equipment in organic hazardous air pollutant service, the permittee shall implement a leak detection and repair (LDAR) program in accordance with 40 CFR 63, Subpart H containing the following elements:
  - (i) Each piece of pipeline equipment subject to 40 CFR 63 Subpart H or FFFF shall be identified such that it can be distinguished readily from equipment that is not subject to 40 CFR 63 Subpart H or FFFF. [40 CFR 63.162(c)]
  - (ii) When a leak is detected as specified in 40 CFR 63.163 and 63.164; 63.168 and 63.169; and 63.173 through 63.174, the permittee shall: [40 CFR 63.162(f)]
    - (1) Clearly identify the leaking equipment.
    - (2) The identification on a valve may be removed after it has been monitored as specified in 40 CFR 63.168(f)(3) and 63.175(e)(7)(i)(D), and no leak has been detected during the follow-up monitoring. If the permittee elects to comply using the provisions of 40 CFR 63.174(c)(1)(i), the identification on a connector may be removed after it is monitored and no leak is detected during that monitoring.
    - (3) The identification which has been placed on equipment determined to have a leak, except for a valve or for a connector that is subject to 40 CFR 63.174(c)(1)(i), may be removed after it is repaired.
  - (iii) Specific standards for each type of pipeline equipment described under **2. Emission Limitations.**

**SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)****Compliance Demonstration Method:**

For the pipeline equipment, compliance shall be determined by review of the records required by 40 CFR 63.181 and the reports required by 40 CFR 63.182, review of performance test results, and by inspections. [40 CFR 63.162(a)]

**2. Emission Limitations:**

- a. Pursuant to 401 KAR 63:020, no owner or operator shall allow any affected facility to emit potentially hazardous matter or toxic substances in such quantities or duration as to be harmful to the health and welfare of humans, animals and plants.
- b. For the pipeline equipment, the permittee shall comply with the fugitive equipment leak emissions standards, pursuant to 40 CFR 63.160 through 63.182, as applicable. See below for detailed standards for different services:
  - (i) Standards: Pumps in light liquid service [40 CFR 63.163]:
    - 40 CFR 63.163(a): Implementation and compliance provisions
    - 40 CFR 63.163(b): Monitoring requirements, leak detection levels, frequency of monitoring
    - 40 CFR 63.163(c): Repair procedures and time frames
    - 40 CFR 63.163(d): Procedures to determine percent leaking pumps and quality improvement program requirements
    - 40 CFR 63.163(e)-(j): Exemptions for specific types of pumps
  - (ii) Standards: Compressors [40 CFR 63.164]
    - 40 CFR 63.164(a)-(e): Operational requirements
    - 40 CFR 63.164(f): Criteria for leak detection
    - 40 CFR 63.164(g): Repair procedures and time frames
    - 40 CFR 63.164(h)-(i): Exemptions for specific types of compressors
  - (iii) Standards: Pressure relief devices in gas/vapor service [40 CFR 63.165]:
    - 40 CFR 63.165(a): Operational requirements
    - 40 CFR 63.165(b): Pressure release procedures
    - 40 CFR 63.165(c)-(d): Exemptions for specific types of pressure relief devices
  - (iv) Standards: Sampling Connection Systems [40 CFR 63.166]:
    - 40 CFR 63.166(a)-(b): Operational requirements
    - 40 CFR 63.166(c): Exemptions for specific types of sampling connection systems
  - (v) Standards: Open-ended valves or lines [40 CFR 63.167]:
    - 40 CFR 63.167(a)-(c): Operational requirements
    - 40 CFR 63.167(d)-(e): Exemptions for specific types of valves
  - (vi) Standards: Valves in gas/vapor service and in light liquid service [40 CFR 63.168]:
    - 40 CFR 63.168(a): Operational requirements
    - 40 CFR 63.168(b)-(d): Monitoring requirements and intervals
    - 40 CFR 63.168(e): Procedures to determine percent leaking valves
    - 40 CFR 63.168(f): Leak repair time frames
    - 40 CFR 63.168(g): First attempt repair procedures
    - 40 CFR 63.168(h): Exemptions for unsafe-to-monitor valves

**SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

- 40 CFR 63.168(i): Exemptions for difficult-to-monitor valves
- (vii) Standards: Instrumentation systems [40 CFR 63.169]:
  - 40 CFR 63.169(a): Monitoring frequency
  - 40 CFR 63.169(b): Leak detection levels
  - 40 CFR 63.169(c): Leak repair time frames
- (viii) Standards: Delay of repair [40 CFR 63.171]:
  - 40 CFR 63.171 Allowances for delay of repair
- (ix) Standards: Agitators in gas/vapor service and in light liquid service [40 CFR 63.173]:
  - 40 CFR 63.173(a): Operational requirements
  - 40 CFR 63.173(b): Monitoring requirements and intervals
  - 40 CFR 63.173(c): Leak repair time frames
  - 40 CFR 63.173(d)-(g): Exemptions for specific types of agitators
  - 40 CFR 63.173(h)-(j): Exemptions for difficult-to-monitor, inaccessible or unsafe-to-monitor agitators
- (x) Standards: connectors in gas/vapor service and in light liquid service. [40 CFR 63.174] Pursuant to 40 CFR 63.2480(b)(4), the permittee may elect to comply with the standards in 40 CFR 63.174 or the standards in 40 CFR 63.169 for connectors in heavy liquid service:
  - 40 CFR 63.169(a) Monitoring frequency
  - 40 CFR 63.169(b) Leak detection levels
  - 40 CFR 63.169(c) Leak repair time frames
  - 40 CFR 63.174(a): Operational requirements
  - 40 CFR 63.174(b): Monitoring requirements and intervals
  - 40 CFR 63.174(c): Procedures for open connectors or connectors with broken seals
  - 40 CFR 63.174(d): Leak repair time frames
  - 40 CFR 63.174(e): Monitoring frequency for repaired connectors
  - 40 CFR 63.174(f)-(h): Exemptions for unsafe-to-monitor, unsafe-to-repair, inaccessible, or ceramic connectors
  - 40 CFR 63.174(i): Procedures to determine percent leaking connectors
  - 40 CFR 63.174(j): Optional credit for removed connectors
- (xi) Quality improvement program for valves. [40 CFR 63.175] Pursuant to 40 CFR 63.168(d)(1)(ii), in Phase III, the permittee may elect to implement the following quality improvement programs if the percent of leaking valves is equal to or exceeds 2 percent:
  - 40 CFR 63.175(a): Quality improvement program alternatives
  - 40 CFR 63.175(b): Criteria for ending quality improvement programs
  - 40 CFR 63.175(c): Alternatives following achievement of less than 2 percent leaking valves target
  - 40 CFR 63.175(d): Quality improvement program to demonstrate further progress
  - 40 CFR 63.175(e): Quality improvement program of technology review and improvement

**SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

- (xii) Quality improvement program for pumps. [40 CFR 63.176] Pursuant to 40 CFR 63.163(d)(2), if, in Phase III, calculated on a 6-month rolling average, the greater of either 10 percent of the pumps or three pumps in the Polymerization, Saponification, Polyrectification or AAR Areas leak, the permittee shall implement the following quality improvement programs for pumps:
  - 40 CFR 63.176(a): Applicability criteria
  - 40 CFR 63.176(b): Criteria for ending the quality improvement program
  - 40 CFR 63.176(c): Criteria for resumption of the quality improvement program
  - 40 CFR 63.176(d): Quality improvement program elements
- (xiii) For the Polymerization, SAP and Polyrectification Areas, the requirements for pressure testing in 40 CFR 63.178(b) may be applied to all processes, not just batch processes. The permittee may elect to use pressure testing of equipment to demonstrate compliance by meeting the following requirements of 40 CFR 63.178(b). Compliance with the provisions of 40 CFR 63.163, 63.168 and 63.169, and 63.173 through 63.176. [40 CFR 63.2480(b)(1) and 63.178(b)]
  - (1) The permittee may switch among the alternatives provided the change is documented as specified in 40 CFR 63.181.[40 CFR 63.178(a)]
  - (2) For the purposes of 40 CFR 63 Subpart FFFF, pressure testing for leaks in accordance with 63.178(b) is not required after reconfiguration of an equipment train if flexible hose connections are the only disturbed equipment.

**Compliance Demonstration Method:**

- a. For compliance with 401 KAR 63:020, if the source alters process rates, material formulations, or any other factor that would result in an increase of HAP emissions or the addition of HAP emissions not previously evaluated by the Division, the source shall submit the appropriate application forms pursuant to 401 KAR 52:020, along with air modeling to show that the facility will remain in compliance with 401 KAR 63:020. The source may perform a screening analysis of the potential to emit of methanol, methyl acetate, vinyl acetate, and any other toxic pollutant emissions at the plant and compare it to established benchmarks (i.e. Reference Concentrations (RfCs), Unit Risk Estimates (UREs), as applicable).
- b. For the pipeline equipment, compliance shall be determined by review of the records required by 40 CFR 63.181 and by inspections. [40 CFR 63.162(a)]

**3. Testing Requirements:**

For the pipeline equipment, the permittee shall comply with the following test methods and procedures requirements pursuant to 40 CFR 63.180(a):

**SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

- a. Monitoring shall comply with Method 21 of 40 CFR part 60, appendix A. [40 CFR 63.180(b)(1)]
- b. The detection instrument shall meet the performance criteria of Method 21 of 40 CFR part 60, appendix A, except the instrument response factor criteria in Section 3.1.2(a) of Method 21 shall be for the average composition of the process fluid not each individual VOC in the stream. For process streams that contain nitrogen, water, air, or other inerts which are not organic HAPs or VOCs, the average stream response factor may be calculated on an inert-free basis. The response factor may be determined at any concentration for which monitoring for leaks will be conducted. If no instrument is available at the plant site that will meet the performance criteria, the instrument readings may be adjusted by multiplying by the average response factor of the process fluid, calculated on an inert-free basis. [40 CFR 63.180(b)(2)]
- c. The instrument shall be calibrated before use on each day of its use by the procedures specified in Method 21 of 40 CFR part 60, appendix A. [40 CFR 63.180(b)(3)]
- d. Calibration gases shall be: [40 CFR 63.180(b)(4)]
  - (i) Zero air (less than 10 parts per million of hydrocarbon in air); and
  - (ii) Mixtures of methane in air at the concentrations specified in paragraphs 63.180(b)(4)(ii)(A) through (b)(4)(ii)(C). A calibration gas other than methane in air may be used if the instrument does not respond to methane or if the instrument does not meet the performance criteria specified in 40 CFR 63.180(b)(2)(i). In such cases, the calibration gas may be a mixture of one or more of the compounds to be measured in air.
  - (iii) The instrument may be calibrated at a higher methane concentration than the concentration specified for that piece of equipment. The concentration of the calibration gas may exceed the concentration specified as a leak by no more than 2,000 parts per million. If the monitoring instrument's design allows for multiple calibration scales, then the lower scale shall be calibrated with a calibration gas that is no higher than 2,000 parts per million above the concentration specified as a leak and the highest scale shall be calibrated with a calibration gas that is approximately equal to 10,000 parts per million. If only one scale on an instrument will be used during monitoring, the permittee need not calibrate the scales that will not be used during that day's monitoring.
- e. Monitoring shall be performed when the equipment is in organic HAP service, in use with an acceptable surrogate volatile organic compound which is not an organic HAP, or is in use with any other detectable gas or vapor. [40 CFR 63.180(b)(5)]
- f. Monitoring data that do not meet the criteria specified in 40 CFR 63.180(b)(1) through (b)(5) may be used to qualify for less frequent monitoring under the provisions in 40 CFR 63.168(d)(2) and (d)(3) or 63.174(b)(3)(ii) or (b)(3)(iii) provided the data meet the following conditions. [40 CFR 63.180(b)(6)]
  - (i) The data were obtained before April 22, 1994.
  - (ii) The departures from the criteria specified in 40 CFR 63.180(b)(1) through (b)(5) or from the specified monitoring frequency of 40 CFR 63.168(c) are



**SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

minor and do not significantly affect the quality of the data. Examples of minor departures are monitoring at a slightly different frequency (such as every six weeks instead of monthly or quarterly), following the performance criteria of section 3.1.2(a) of Method 21 of appendix A of 40 CFR part 60 instead of 40 CFR 63.180(b)(2), or monitoring at a different leak definition if the data would indicate the presence or absence of a leak at the concentration specified in this subpart. Failure to use a calibrated instrument is not considered a minor departure.

- g. When equipment is monitored for compliance as required in 40 CFR 63.164(i), 63.165(a), and 63.172(f) or when equipment subject to a leak definition of 500 ppm is monitored for leaks as required by 40 CFR 63 Subpart H, the permittee may elect to adjust or not to adjust the instrument readings for background. If the permittee elects to not adjust instrument readings for background, the permittee shall monitor the equipment according to the procedures specified in 40 CFR 63.180(b)(1) through (b)(4). In such case, all instrument readings shall be compared directly to the applicable leak definition to determine whether there is a leak. If the permittee elects to adjust instrument readings for background, the permittee shall monitor the equipment according to the following procedures. [40 CFR 63.180(c)]
  - (i) The requirements of 40 CFR 63.180(b)(1) through (4) shall apply.
  - (ii) The background level shall be determined, using the same procedures that will be used to determine whether the equipment is leaking.
  - (iii) The instrument probe shall be traversed around all potential leak interfaces as close to the interface as possible as described in Method 21 of 40 CFR part 60, appendix A.
  - (iv) The arithmetic difference between the maximum concentration indicated by the instrument and the background level is compared with 500 parts per million for determining compliance.
- h.
  - (i) Each piece of equipment within a process unit that can reasonably be expected to contain equipment in organic HAP service is presumed to be in organic HAP service unless the permittee demonstrates that the piece of equipment is not in organic HAP service. For a piece of equipment to be considered not in organic HAP service, it must be determined that the percent organic HAP content can be reasonably expected not to exceed 5 percent by weight on an annual average basis. For purposes of determining the percent organic HAP content of the process fluid that is contained in or contacts equipment, Method 18 of 40 CFR part 60, appendix A shall be used. [40 CFR 63.180(d)]
  - (ii)
    - (1) The permittee may use good engineering judgment rather than the procedures in 40 CFR 63.180(d)(1) to determine that the percent organic HAP content does not exceed 5 percent by weight. When the permittee and the Division do not agree on whether a piece of equipment is not in organic HAP service, however, the procedures in 40 CFR 63.180(d)(1) shall be used to resolve the disagreement.
    - (2) Conversely, the permittee may determine that the organic HAP content of the process fluid does not exceed 5 percent by weight

**SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

by, for example, accounting for 98 percent of the content and showing that organic HAP is less than 3 percent.

- (iii) If the permittee determines that a piece of equipment is in organic HAP service, the determination can be revised after following the procedures in 40 CFR 63.180(d)(1), or by documenting that a change in the process or raw materials no longer causes the equipment to be in organic HAP service.
- (iv) Samples used in determining the percent organic HAP content shall be representative of the process fluid that is contained in or contacts the equipment.

**4. Specific Monitoring Requirements:**

- a. For the pipeline equipment, refer to **3. Testing Requirements**.
- b. For the pipeline equipment, fulfill all monitoring requirements per **2. Emission Limitations**.

**5. Specific Recordkeeping Requirements:**

- a. All records shall be maintained in accordance with **Section F.2**.
- b. For the equipment subject to 40 CFR 63 Subparts F, G and H, all records shall be kept in accordance with 40 CFR 63.103(c).
- c. For M06, the permittee shall keep the following records: [40 CFR 63.2525]
  - (i) Each applicable record required by 40 CFR 63 Subpart A and in referenced subparts F, G and SS of this part 63. [40 CFR 63.2525(a)]
  - (ii) Records of each operating scenario as specified: [40 CFR 63.2525(b)]
    - (1) A description of the process and the type of process equipment used.
    - (2) An identification of related process vents, including their associated emissions episodes if not complying with the alternative standard in 40 CFR 63.2505; wastewater point of determination (POD); storage tanks; and transfer racks.
    - (3) The applicable control requirements of 40 CFR 63 Subpart FFFF, including the level of required control, and for vents, the level of control for each vent.
    - (4) The control device or treatment process used, as applicable, including a description of operating and/or testing conditions for any associated control device.
    - (5) The process vents, wastewater POD, transfer racks, and storage tanks (including those from other processes) that are simultaneously routed to the control device or treatment process(s).
    - (6) The applicable monitoring requirements of this subpart and any parametric level that assures compliance for all emissions routed to the control device or treatment process.
    - (7) Calculations and engineering analyses required to demonstrate compliance.

**SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

- (8) For reporting purposes, a change to any of these elements not previously reported, except for 63.2525(b)(5), constitutes a new operating scenario.
  - (iii) In the SSMP required by 40 CFR 63.6(e)(3), the permittee is not required to include Group 2 emission points, unless those emission points are used in an emissions average. [40 CFR 63.103(c)(3), 40 CFR 63.2525(j)]
  - (iv) For equipment leaks, the SSMP requirement is limited to control devices and is optional for other equipment. [40 CFR 63.2525(j)]
- d. Pursuant to 40 CFR 63.126(c), for the Group 2 transfer racks, the permittee shall record, update annually, and maintain the following information in a readily accessible location on site: [40 CFR 63.130(f)]
  - (i) An analysis demonstrating the design and actual annual throughput of the transfer rack;
  - (ii) An analysis documenting the weight-percent organic HAPs in the liquid loaded. Examples of acceptable documentation include but are not limited to analyses of the material and engineering calculations; and
  - (iii) An analysis documenting the annual rack weighted average HAP partial pressure of the transfer rack.
    - (1) For Group 2 transfer racks that are limited to transfer of organic HAPs with partial pressures less than 10.3 kilopascals, documentation is required of the organic HAPs (by compound) that are transferred. The rack weighted average partial pressure does not need to be calculated.
    - (2) For racks transferring one or more organic HAPs with partial pressures greater than 10.3 kilopascals, as well as one or more organic HAPs with partial pressures less than 10.3 kilopascals, a rack weighted partial pressure shall be documented. The rack weighted average HAP partial pressure shall be weighted by the annual throughput of each chemical transferred.

**Pipeline Equipment**

- e. The permittee may comply with the recordkeeping requirements for the equipment in the Polymerization, Saponification, Polyrectification and AAR Areas in one recordkeeping system if the system identifies each record by process unit and the program being implemented (e.g., quarterly monitoring, quality improvement) for each type of equipment. All records required by 40 CFR 63.181 shall be maintained in a manner that can be readily accessed at the plant site. [40 CFR 63.181(a)]
- f. The permittee shall maintain all records pertaining to the pipeline equipment required by 40 CFR 63.181(b).
  - (i) (1) A list of identification numbers for equipment (except instrumentation systems) subject to the requirements of this subpart. [40 CFR 63.181(b)(1)(i)]
  - (2) A schedule by process unit for monitoring connectors subject to 40 CFR 63.174(a) and valves subject to 40 CFR 63.168(d).

**SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

- (3) Physical tagging of the equipment to indicate that it is in organic HAP service is not required. Equipment subject to the provisions of this subpart may be identified on a plant site plan, in log entries, or by other appropriate methods.
- (ii)
  - (1) A list of identification numbers for equipment that the permittee elects to equip with a closed-vent system and control device, under the provisions of 40 CFR 63.163(g), 63.164(h), 63.165(c), or 63.173(f). [40 CFR 63.181(b)(2)(i)]
  - (2) A list of identification numbers for compressors that the permittee elects to designate as operating with an instrument reading of less than 500 parts per million above background, under the provisions of 40 CFR 63.164(i).
- (iii) A list of identification numbers for pressure relief devices subject to 40 CFR 63.165(a) and for pressure relief devices equipped with rupture disks, under the provisions of 40 CFR 63.165(d). [40 CFR 63.181(b)(3)]
- (iv) Individual components in an instrumentation system need not be identified.
- (v) Identification of screwed connectors subject to 40 CFR 63.174(c)(2). Identification can be by area or grouping as long as the total number within each group or area is recorded.
- (vi) The following information shall be recorded for each dual mechanical seal system:
  - (1) Design criteria required in 40 CFR 63.163(e)(6)(i), 63.164(e)(2), and 63.173(d)(6)(i) and an explanation of the design criteria; and
  - (2) Any changes to these criteria and the reasons for the changes.
- (vii) The following information pertaining to all pumps subject to 40 CFR 63.163(j), valves subject to 40 CFR 63.168(h) and (i), agitators subject to 40 CFR 63.173(h) through (j), and connectors subject to 40 CFR 63.174(f) and (g) shall be recorded:
  - (1) Identification of equipment designated as unsafe to monitor, difficult to monitor, or unsafe to inspect and the plan for monitoring or inspecting this equipment.
  - (2) A list of identification numbers for the equipment that is designated as difficult to monitor, an explanation of why the equipment is difficult to monitor, and the planned schedule for monitoring this equipment.
  - (3) A list of identification numbers for connectors that are designated as unsafe to repair and an explanation why the connector is unsafe to repair.
- (viii)
  - (1) A list of valves removed from and added to the process unit, as described in 40 CFR 63.168(e)(1), if the net credits for removed valves is expected to be used.
  - (2) A list of connectors removed from and added to the process unit, as described in 40 CFR 63.174(i)(1), and documentation of the integrity of the weld for any removed connectors, as required in 40

**SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

CFR 63.174(j). This is not required unless the net credits for removed connectors is expected to be used.

- (ix) For any leaks detected as specified in 40 CFR 63.163 and 63.164; 63.168; and 63.173 through 63.174, a weatherproof and readily visible identification, marked with the equipment identification number, shall be attached to the leaking equipment.
- g. For visual inspections, the permittee shall document that the inspection was conducted and the date of the inspection. These records shall be kept for two years [40 CFR 63.181(c)].
- h. When a leak is detected, the following information shall be recorded and kept for two years. [40 CFR 63.181(d)]
  - (i) The instrument and the equipment identification number and the operator name, initials, or identification number.
  - (ii) The date the leak was detected and the date of first attempt to repair the leak.
  - (iii) The date of successful repair of the leak.
  - (iv) Maximum instrument reading measured by Method 21 of 40 CFR part 60, appendix A after it is successfully repaired or determined to be nonrepairable.
  - (v) “Repair delayed” and the reason for the delay if a leak is not repaired within 15 calendar days after discovery of the leak.
    - (1) The permittee may develop a written procedure that identifies the conditions that justify a delay of repair. The written procedures may be included as part of the startup/shutdown/malfunction plan, required by 40 CFR 63.6(e)(3), for the source or may be part of a separate document that is maintained at the plant site. In such cases, reasons for delay of repair may be documented by citing the relevant sections of the written procedure.
    - (2) If delay of repair was caused by depletion of stocked parts, there must be documentation that the spare parts were sufficiently stocked on-site before depletion and the reason for depletion.
  - (vi) Dates of process unit shutdowns that occur while the equipment is unrepaired.
  - (vii)
    - (1) Identification, either by list, location (area or grouping), or tagging of connectors that have been opened or otherwise had the seal broken since the last monitoring period required in 40 CFR 63.174(b), as described in 40 CFR 63.174(c)(1), unless the permittee elects to comply with 63.174(c)(1)(ii).
    - (2) The date and results of monitoring as required in 40 CFR 63.174(c). If identification of connectors that have been opened or otherwise had the seal broken is made by location under 40 CFR 63.181(d)(7)(i), then all connectors within the designated location shall be monitored.
  - (viii) Copies of the periodic reports as specified in 40 CFR 63.182(d), if records are not maintained on a computerized database capable of generating summary reports from the records.

**SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

- i. For the Polymerization, SAP and Polyrectification Areas, if the permittee elects to comply with the pressure testing requirements in accordance with **2.b.(xii) Emission Limitations**, the permittee is exempt from the requirements of paragraphs e, f, g and i of this section. Instead, the permittee shall maintain records as specified in 40 CFR 63.181(e).
- j. The results of compliance tests required for compressors and the dates and results of monitoring following a pressure relief valve pressure release shall be recorded. The results shall include: [40 CFR 63.181(f)]
  - (i) The background level measured during each compliance test.
  - (ii) The maximum instrument reading measured at each piece of equipment during each compliance test.
- k. The permittee shall maintain records required for closed-vent systems and control devices subject to 40 CFR 63.172. [40 CFR 63.181 (g)]
  - (i) The design specifications and performance demonstrations specified in 40 CFR 63.181(g)(1)(i) through (g)(1)(iii) shall be retained for the life of the equipment.
    - (1) Detailed schematics, design specifications of the control device, and piping and instrumentation diagrams.
    - (2) The dates and descriptions of any changes in the design specifications.
    - (3) The flare design (i.e., steam-assisted, air-assisted, or non-assisted) and the results of the compliance demonstration required by 40 CFR 63.11(b) of 40 CFR 63 Subpart A.
  - (ii) Records of operation of closed-vent systems and control devices, as specified in 40 CFR 63.181(g)(2)(i) through (g)(2)(iii) shall be retained for 2 years.
    - (1) Dates and durations when the closed-vent systems and control devices required in 40 CFR 63.163 through 63.166, and 63.170 are not operated as designed as indicated by the monitored parameters, including periods when a flare pilot light system does not have a flame.
    - (2) Dates and durations during which the monitoring system or monitoring device is inoperative.
    - (3) Dates and durations of start-ups and shutdowns of control devices required in 40 CFR 63.163 through 63.166, and 63.170.
- l. If the permittee implements any of the quality improvement programs required by 40 CFR 63.175 or 63.176, the records specified in 40 CFR 63.181(h) shall be maintained for a period of the quality improvement plan for the process unit.

**6. Specific Reporting Requirements:**

- a. For the equipment subject to 40 CFR 63 Subparts F, G and H, all reports shall be submitted in accordance with 40 CFR 63.103(d).
- b. For the AAR Area, the permittee shall submit the following reports:
  - (i) 40 CFR 63.182(a)(1), Initial Notification - The permittee has fulfilled this requirement through documentation dated August 17, 1994 submitted to U.S. EPA Region IV and the Division.

**SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

- (ii) 40 CFR 63.182(a)(2), Notification of Compliance Status - The permittee has fulfilled this requirement through documentation dated September 19, 1997 submitted to U.S. EPA Region IV and the Division.
    - (iii) 40 CFR 63.182(a)(3), Periodic Reports - The permittee shall submit to the Division, semiannually, the information required by 40 CFR 63.182(d)(2).
  - c. For equipment subject to 40 CFR 63 Subpart FFFF, the permittee shall submit the following reports:
    - (i) 40 CFR 63.2515(b), Initial Notification – The permittee has fulfilled this requirement through documentation dated March 8, 2004 submitted to U.S. EPA Region IV and the Division.
    - (ii) A notification of performance test at least 60 calendar days before the performance test is scheduled to begin as required in 40 CFR 63.7(b)(1), if applicable. [40 CFR 63.2515(c)]
    - (iii) A Notification of compliance status report containing the information specified in 40 CFR 63.2520(d) no later than 150 days after the compliance date specified in 40 CFR 63.2445.
    - (iv) A Compliance report containing the information specified in 40 CFR 63.2520(e) semiannually according to the requirements in 40 CFR 63.2520(b).
  - d. The permittee shall furnish reports as specified in **5. Specific Reporting Requirements.**
  - e. Also refer to **Section F.5.**
- 7. **Specific Control Equipment Operating Conditions:**  
None
- 8. **Alternate Operating Scenarios:**  
For the pipeline equipment subject to 40 CFR 63.2480(a) and Table 6 to Subpart FFFF, the permittee may comply with one of the following requirements.
  - a. Subpart UU of 40 CFR 63 and the requirements referenced therein, except as specified in §63.2480(b) and (d);
  - b. Subpart H of 40 CFR 63 and the requirements referenced therein, except as specified in §63.2480(b) and (d); or
  - c. 40 CFR 65, subpart F and the requirements referenced therein, except as specified in § 63.2480(c) and (d).

## SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

### COOLING TOWERS

EP	Emission Point Description
--	<b>Non-Contact Process Cooling Tower (1), CT-7</b> <u>Description:</u> Provides cooling water to AAR Area <u>Water Flow Rate:</u> 22,000 gallons/minute HON Heat Exchange System
--	<b>Non-Contact Process Cooling Towers (2), CT-2 and CT-6</b> <u>Description:</u> Provides cooling water to the SAP Area <u>Water Flow Rate:</u> 21,000 gallons/minute total MON Heat Exchange System

### APPLICABLE REGULATIONS:

401 KAR 63:002, Sections 2 and 3(1)(d), which incorporates by reference 40 CFR 63 Subpart F, *National Emission Standards for Organic Hazardous Air Pollutants from the Synthetic Organic Chemical Manufacturing Industry*, applies to the cooling tower CT-7 and applies to CT-2 and CT-6, pursuant to 40 CFR 63, Subpart FFFF.

401 KAR 63:002, Sections 2 and 3(1)(mmm), which incorporates by reference 40 CFR 63 Subpart FFFF, *National Emission Standards for Hazardous Air Pollutants: Miscellaneous Organic Chemical Manufacturing*, applies to the Polymerization, Saponification, and Polyrectification Areas, as these areas produce polyvinyl alcohol, listed under Table 1 of 40 CFR 63 Subpart B, *Requirements for Control Technology Determinations for Major Sources in Accordance with Clean Air Act Sections, Sections 112(g) and 112(j)*, as a MON Source Category. 40 CFR 63.2490 applies to the cooling towers CT-2 and CT-6.

### NON-APPLICABLE REGULATIONS:

401 KAR 63:002, Sections 2 and 3(1)(d), which incorporates by reference 40 CFR 63 Subpart F, *National Emission Standards for Organic Hazardous Air Pollutants from the Synthetic Organic Chemical Manufacturing Industry*, is not applicable to the cooling towers CT-2 and CT-6, as these cooling towers are not part of a chemical manufacturing processing unit that produces chemicals listed under Table 1 of 40 CFR 63, Subpart F as a primary product.

401 KAR 63:002, Sections 2 and 3(1)(m), which incorporates by reference 40 CFR 63 Subpart Q, *National Emission Standards for Hazardous Air Pollutants for Industrial Process Cooling Towers*, is not applicable since chromium based water treatment chemicals are not used in the cooling tower.

### 1. Operating Limitations:

- a. The provisions of 40 CFR Part 63, Subpart A - General Provisions, which are incorporated by reference in 401 KAR 63:002 Section 3(a), apply to the equipment listed in this section. Table 3 to Subpart F of Part 63 specifies the provisions of Subpart A that apply and those that do not apply to owners and operators of sources subject to Subparts F, G and H of Part 63. [40 CFR 63.103(a)]
- b. The provisions of 40 CFR Part 63, Subpart A - General Provisions, which are incorporated by reference in 401 KAR 63:002 Section 3(a), apply to the equipment listed in this section that is subject to Subpart FFFF. Table 12 to Subpart FFFF of Part 63 specifies the provisions of Subpart A that apply and those that do not apply.



**SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

[40 CFR 63.2540]

- c. The use of chromium based water treatment chemicals in the cooling towers is prohibited in order to preclude applicability of 40 CFR 63 Subpart Q.

**2. Emission Limitations:**

The permittee shall monitor each heat exchange system used to cool process equipment in the Polymerization, Saponification, Polyrectification and AAR Areas according to the provisions in **4.a. Specific Monitoring Requirements**. Whenever a leak is detected, the owner or operator shall comply with **4.b. and c. Specific Monitoring Requirements**. [40 CFR 63.104(a), 40 CFR 63.2490]

**Compliance Demonstration Method:**

Refer to **4. Specific Monitoring Requirements**.

**3. Testing Requirements:**

None

**4. Specific Monitoring Requirements:**

- a. The permittee shall comply with the provisions in 40 CFR 63.104(b) by monitoring the cooling water for total hazardous air pollutants, total volatile organic compounds, total organic carbon, one or more speciated HAP compounds, or other representative substances that would indicate the presence of a leak in the heat exchange system and complying with the following requirements specified in 40 CFR 63.104(b)(1) through (b)(6). [40 CFR 63.104(b), 40 CFR 63.2490(a)]
- (i) The cooling water shall be monitored monthly for the first 6 months and quarterly thereafter to detect leaks.
  - (ii) For recirculating heat exchange systems (cooling tower systems), the monitoring of speciated hazardous air pollutants or total hazardous air pollutants refers to the hazardous air pollutants listed in Table 4 of 40 CFR 63 Subpart F. For once-through heat exchange systems, the monitoring of speciated hazardous air pollutants or total hazardous air pollutants refers to the hazardous air pollutants listed in Table 9 of 40 CFR 63 Subpart G.
  - (iii) The concentration of the monitored substance(s) in the cooling water shall be determined using any EPA-approved method listed in 40 CFR 136 as long as the method is sensitive to concentrations as low as 10 parts per million and the same method is used for both entrance and exit samples. Alternative methods may be used upon approval by the Administrator.
  - (iv) The samples shall be collected either at the entrance and exit of each heat exchange system or at locations where the cooling water enters and exits each heat exchanger or any combination of heat exchangers, according to the provisions of 40 CFR 63.104(b)(4)(i) through (iii).
  - (v) A minimum of three sets of samples shall be taken at each entrance and exit as defined in 40 CFR 63.104(b)(4). The average entrance and exit concentrations shall then be calculated. The concentration shall be

**SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

- corrected for the addition of any makeup water or for any evaporative losses, as applicable.
- (vi) A leak is detected if the exit mean concentration is found to be greater than the entrance mean using a one-sided statistical procedure at the 0.05 level of significance and the amount by which it is greater is at least 1 part per million or 10 percent of the entrance mean, whichever is greater.
- b. If a leak is detected according to the criteria of 40 CFR 63.104(b), the permittee shall comply with the following requirements in 40 CFR 63.104(d)(1) and (d)(2), except as provided in 40 CFR 63.104(e). [40 CFR 63.104(d), 40 CFR 63.2490(a)]
    - (i) The leak shall be repaired as soon as practical but not later than 45 calendar days after the owner or operator receives results of monitoring tests indicating a leak. The leak shall be repaired unless the owner or operator demonstrates that the results are due to a condition other than a leak.
    - (ii) Once the leak has been repaired, the owner or operator shall confirm that the heat exchange system has been repaired within 7 calendar days of the repair or startup, whichever is later.
  - c. Delay of repair of heat exchange systems for which leaks have been detected is allowed if the equipment is isolated from the process. Delay of repair is also allowed if repair is technically infeasible without a shutdown and any one of the conditions in 40 CFR 63.104(e)(1) or 63.104(e)(2) is met. [40 CFR 63.104(e), 40 CFR 63.2490(a)]

**5. Specific Recordkeeping Requirements:**

- a. All records shall be maintained in accordance with **Section F.2.**
- b. The permittee shall keep the following records: [40 CFR 63.2525]
  - (i) Each applicable record required by 40 CFR 63 Subpart A and in referenced subparts F, G and SS of this part 63. [40 CFR 63.2525(a)]
  - (ii) Records of each operating scenario as specified: [40 CFR 63.2525(b)]
    - (1) A description of the process and the type of process equipment used.
    - (2) An identification of related process vents, including their associated emissions episodes if not complying with the alternative standard in 40 CFR 63.2505; wastewater point of determination (POD); storage tanks; and transfer racks.
    - (3) The applicable control requirements of 40 CFR 63 Subpart FFFF, including the level of required control, and for vents, the level of control for each vent.
    - (4) The control device or treatment process used, as applicable, including a description of operating and/or testing conditions for any associated control device.
    - (5) The process vents, wastewater POD, transfer racks, and storage tanks (including those from other processes) that are simultaneously routed to the control device or treatment process(s).

**SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

- (6) The applicable monitoring requirements of this subpart and any parametric level that assures compliance for all emissions routed to the control device or treatment process.
  - (7) Calculations and engineering analyses required to demonstrate compliance.
  - (8) For reporting purposes, a change to any of these elements not previously reported, except for 63.2525(b)(5), constitutes a new operating scenario.
- c. For the heat exchange systems, the permittee shall retain the following records as specified in 40 CFR 63.103(c)(1). [40 CFR 63.104(f)(1), 40 CFR 63.2490(a)]
  - (i) Monitoring data required by **4. Specific Monitoring Requirements** indicating a leak and the date when the leak was detected, and if demonstrated not to be a leak, the basis for that determination;
  - (ii) The dates of efforts to repair leaks; and
  - (iii) The method or procedure used to confirm repair of a leak and the date repair was confirmed.

**6. Specific Reporting Requirements:**

- a. For equipment subject to 40 CFR 63 Subpart FFFF, the permittee shall submit the following reports:
  - (i) 40 CFR 63.2515(b), Initial Notification – The permittee has fulfilled this requirement through documentation dated March 8, 2004 submitted to U.S. EPA Region IV and the Division.
  - (ii) A notification of performance test at least 60 calendar days before the performance test is scheduled to begin as required in 40 CFR 63.7(b)(1), if applicable. [40 CFR 63.2515(c)]
  - (iii) A Notification of compliance status report containing the information specified in 40 CFR 63.2520(d) no later than 150 days after the compliance date specified in 40 CFR 63.2445.
  - (iv) A Compliance report containing the information specified in 40 CFR 63.2520(e) semiannually according to the requirements in 40 CFR 63.2520(b).
- b. The permittee shall furnish reports as specified in **5. Specific Reporting Requirements**.
- c. Also refer to **Section F.5**.
- d. If the permittee invokes the delay of repair provisions for a heat exchange system, the permittee shall submit the following information in the next periodic report. If the leak remains unrepaired, the information shall also be submitted in each subsequent periodic report, until repair of the leak is reported. [40 CFR 63.104(f)(2), 40 CFR 63.2490(a)]
  - (i) The presence of the leak and the date that the leak was detected.
  - (ii) Whether or not the leak has been repaired.
  - (iii) The reason(s) for delay of repair. If delay of repair is invoked due to the reasons described in 40 CFR 63.104(e)(2), documentation of emissions estimates must also be submitted.
  - (iv) The expected date of repair, if the leak remains unrepaired.

**SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

(v) The date the leak was successfully repaired, if the leak is repaired.

**7. Specific Control Equipment Operating Conditions:**

None

**8. Alternate Operating Scenarios:**

None

**SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)****WAREHOUSE FUGITIVES**

EP	Emission Point Description
M10	Warehouse Fugitives

**APPLICABLE REGULATIONS:**

401 KAR 63:010, *Fugitive Emissions*, applies to sources of fugitive emissions not elsewhere subject to an opacity standard.

401 KAR 63:020, *Potentially Hazardous Matter or Toxic Substances*, applies to sources which emit or may emit potentially hazardous or toxic substances.

**1. Operating Limitations:**

None

**2. Emission Limitations:**

- a. Pursuant to 401 KAR 63:010, Section 3(3), when dust, fumes, gases, mist odorous matter, vapors, or any combination thereof escape from a building or equipment in such a manner and amount as to cause a nuisance or to violate any administrative regulation, the secretary may order that the building or equipment in which processing, handling and storage are done be tightly closed and ventilated in such a way that all air and gases and air or gas-borne material leaving the building or equipment are treated by removal or destruction or air contaminants before discharge to the open air.
- b. Pursuant to 401 KAR 63:020, no owner or operator shall allow any affected facility to emit potentially hazardous matter or toxic substances in such quantities or duration as to be harmful to the health and welfare of humans, animals and plants.

**Compliance Demonstration Method:**

- a. In order to demonstrate compliance with 401 KAR 63:010, Fugitive Emissions, each affected facility listed above shall be controlled with wet suppression, enclosures, and/or dust collection equipment.
- b. For compliance with 401 KAR 63:020, if the source alters process rates, material formulations, or any other factor that would result in an increase of HAP emissions or the addition of HAP emissions not previously evaluated by the Division, the source shall submit the appropriate application forms pursuant to 401 KAR 52:020, along with air modeling to show that the facility will remain in compliance with 401 KAR 63:020. The source may perform a screening analysis of the potential to emit of methanol and any other toxic pollutant emissions at the plant and compare it to established benchmarks (i.e. Reference Concentrations (RfCs), Unit Risk Estimates (UREs), as applicable).

**3. Testing Requirements:**

None

**SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

**4. Specific Monitoring Requirements:**

None

**5. Specific Recordkeeping Requirements:**

None

**6. Specific Reporting Requirements:**

None

**7. Specific Control Equipment Operating Conditions:**

None

**SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

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**GROUP REQUIREMENTS**

F01(11-)	Polymerization Line 50 Reactors and Auxiliary Equipment
F01(12-)	Polymerization Line 100 Reactors and Auxiliary Equipment
F01(13-)	Polymerization Line 100 Stripper and Auxiliary Equipment
F01(14-)	Polymerization Line 150 Reactors and Auxiliary Equipment
F01(15-)	Polymerization Line 150 Stripper and Auxiliary Equipment
P02	Polymerization Line 50 Catalyst Preparation Tanks
P05	Polymerization Line 100 Catalyst Preparation Tanks
P08	Polymerization Line 150 Catalyst Preparation Tanks
S01	Saponification Process Unit
S02	Saponification Process Unit Drying
S04	200 Saponification Line Product Transfer Collector
S08	250 Saponification Line Product Transfer Collector
S12	400 Saponification Line Product Transfer Collector
S16	600 Saponification Line Product Transfer Collector
W01	200 WEDCO Line Transfer and Grinding
W04	250 WEDCO Line Transfer and Grinding
W07	400 WEDCO Line Transfer and Grinding
W11	600 WEDCO Line Intermediate Grinding/Sizing
W14-W25	WEDCO Silos #1 - #4, #7 - #15
W26-W28	WEDCO Ground Silos #15 - #17
W29	WEDCO Bulk Loading
W33	Bagging Operation: Filling - Sackmatic, PA-5716
W34	Bagging Hopper, FB-5723
W36	Bagging Area Fugitives
W37	North Bulk Truck Loading Station
W38	South Bulk Truck Loading Station
F01(2A), A01	East Methyl Acetate Extraction Tower, DA-5300
F01(3A), A02	West Methyl Acetate Extraction Tower, DA-5304
F01(5A), A04	SAP Methanol Tower, DA-5303
F01(9A)	Vinyl Recovery Tower, DA-5104
F01(10A)	Vinyl Extraction Tower, DA-5110
A07	Dilute Acid Tank Condenser, EA-5340
A08	Three (3) Acetic Acid Rundown Tanks, FA-5322A/B/C
R04	Inhibitor (BQ) Feed Tank, FA-5109
F01(18-)	West Tank Farm Nest
T05	Methanol Storage Tank, FB-5531
T06	Methanol Saponification Tank System
T07	Mother Liquor Storage Tank, FB-5536
T08	Mother Liquor Storage Tank, FB-5537
T09	Methyl Acetate/Methanol Storage Tank
F01(19-)	Recovered Vinyl Acetate Rework Storage Tanks
T11	Acetic Acid Tanks

## **SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

### **APPLICABLE REGULATIONS:**

This source has elected to accept annual limits in order to preclude the applicability of 401 KAR 51:017, *Prevention of Significant Deterioration of Air Quality* (PSD) for volatile organic compounds and particulate matter.

### **Permits**

Permit No. VF-03-001, issued on September 5, 2003

Permit No. S-95-198R, issued on June 4, 1998

Permit No. S-97-054, issued on May 20, 1997

Permit No. C-86-172 (Revision 1), issued on September 26, 1995

Permit No. O-87-015, issued on March 27, 1987

Permit No. C-84-146, issued on August 21, 1984

### **1. Operating Limitations:**

The permittee shall comply with the operating limitations specified below. Compliance with these operating limitations and the source emission limitations of **2. Emission Limitations** shall make the requirements of 401 KAR 51:017, *Prevention of Significant Deterioration of Air Quality*, not applicable to this source:

- a. The loading rates of polyvinyl alcohol (PVOH) shall not exceed the following limitations: [VF-03-001, issued on September 5, 2003]
  - (i) W29: 75,000 tons per yr, on a twelve (12) consecutive month basis
  - (ii) W33: 5,000 tons per yr, on a twelve (12) consecutive month basis
  - (iii) W34: 63,022 tons per yr, on a twelve (12) consecutive month basis
  - (iv) W37: 75,000 tons per yr, on a twelve (12) consecutive month basis
  - (v) W38: 75,000 tons per yr, on a twelve (12) consecutive month basis
- b. The production rates shall not exceed the following limitations: [Permit No. S-95-198R, issued on June 4, 1998 and Permit No. C-86-172 (Revision 1), issued on September 26, 1995]
  - (i) F01(3A): 85,000 lbs/hr and 372,300 tons per yr, on a twelve (12) consecutive month basis
  - (ii) F01(9A): 55,420 lbs/hr and 242,748 tons per yr, on a twelve (12) consecutive month basis
  - (iii) F01(10A): 55,260 lbs/hr and 242,039 tons per yr, on a twelve (12) consecutive month basis



**SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

- c. The production rates shall not exceed the following limitations determined on a twelve (12) consecutive month basis: [Permit No. S-95-198R, issued on June 4, 1998]
  - (i) F01(2A): 53,000 lbs/hr
  - (ii) F01(4A): 120,000 lbs/hr
  - (iii) F01(5A): 100,000 lbs/hr
  - (iv) F01(7A): 31,600 lbs/hr

**Compliance Demonstration Method:**

- a. Refer to **4. Specific Monitoring Requirements.**
- b. Refer to **7. Specific Control Equipment Operating Conditions.**

**2. Emission Limitations:**

To preclude the applicability of 401 KAR 51:017, *Prevention of Significant Deterioration of Air Quality*, the permittee shall comply with the following emission limitations:

- a. The total increase in emissions of volatile organic compounds (VOC) from the 1998 emissions survey (actual emissions in 1997) to present, from the summation of emissions from EP F01(2A), F01(5A), F01(9A), F01(10A), F01(11-), F01(12-), F01(13-), F01(19-), P08, S01, W01, W04, W07, W14-W25, W29, A08, T05, T07, and T08 shall not exceed 40 tons per year. [Permit No. S-95-198R, issued on June 4, 1998]
- b. The total increase in emissions of VOC from the 1984 emissions survey (actual emission in 1983) to present, from the summation of emissions from EP F01(11-), F01(12-), F01(13-), F01(19-), P08, S01, A08, T05, T07, and T08 shall not exceed 40 tons per year. [Permit No. C-84-146, issued on August 21, 1984]
- c. The total VOC emissions from EP S01 and S02 shall not exceed 37.67 tons per consecutive twelve (12) month period. [Permit No. O-87-015, Condition 18, issued on March 27, 1987]
- d. The total emissions of particulate matter (PM) from the summation of emissions from EP W01, W04, W07, W11, W14-W25, W26-W28, S04, S08, S12 and S16 shall not exceed 25 tons per consecutive twelve (12) month period. [Permit No. C-84-146 issued on August 21, 1984]
- e. The permittee shall also comply with the production limitations established in **1. Operating Limitations** for EP F01(2A), F01(3A), F01(4A), F01(5A), F01(9A), F01(10A) and W29.

## SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

### Compliance Demonstration Method:

- a. Calculate the VOC emissions from the emission units specified in each limit of **2. Emission Limitations** paragraphs a and b as follows:

$$\text{Monthly Emission Rate} = \sum_{i=1}^n [\text{monthly production rate (tons) per emission unit}] \times \text{EF} \times (1 - \text{CE}/100)$$

Where: i = the emission unit

n = the number of emission units included in the emission limit

EF = emission factor (lb/ton process weight, based on the most recent stack test, material balance or other factor approved by the Division)

CE = control efficiency (%)

$$\text{Annual Emission Rate} = \sum_{i=1}^n [\text{VOC emitted this month} + \text{VOC emitted previous 11 consecutive months}]$$

- b. Calculate the PM emissions from the emission units specified in **2.c. Emission Limitations** as follows:

$$\text{Monthly Emission Rate} = \sum_{i=1}^n [\text{monthly PVOH production rate (tons) per emission unit}] \times \text{EF} \times (1 - \text{CE}/100)$$

Where: i = the emission unit

n = the number of emission units included in the emission limit

EF = emission factor (lb PM / ton PVOH produced)

CE = control efficiency (%)

$$\text{Annual Emission Rate} = \sum_{i=1}^n [\text{PM emitted this month} + \text{PM emitted previous 11 consecutive months}]$$

- c. Also refer to **4. Specific Monitoring Requirements**.
- d. Refer to **7. Specific Control Equipment Operating Conditions**.

### 3. Testing Requirements:

None

### 4. Specific Monitoring Requirements:

- a. The permittee shall monitor and maintain records of the following information, on a monthly and consecutive twelve (12) month basis:
- (i) The catalyst throughput for the Line 50 Catalyst Preparation Tanks (EP P02);
  - (ii) The feed rate and the paste throughput for Line 100 Stripper and Auxiliary Equipment (EP F01(13-));
  - (iii) The feed rate and paste throughput for Line 150 Stripper and Auxiliary

**SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

- Equipment (EP F01(15-));
- (iv) The processing rate from each EP S01(A), S01(B), S01(C), S01(D), S02(A), S02(B), S02(C), and S02(D);
  - (v) The production rate from each EP F01(2A), F01(3A), F01(4A), F01(5A), F01(9A), F01(10A);
  - (vi) The PVOH production rate from each EP W01, W04, W07, W11, W14-W25, W26-W28, W29, S04, S08, S12 and S16;
  - (vii) The throughput for the Paste Storage Tanks West Nest #3 (EP F01(18-));
  - (viii) The throughput for the Methanol Storage Tank (EP T05);
  - (ix) The throughput for the Methanol Saponification Tank System (EP T06);
  - (x) The throughput for the N. Mother Liquor Storage Tank (EP T07);
  - (xi) The throughput for the S. Mother Liquor Storage Tank (EP T08);
  - (xii) The throughput for the Methyl Acetate/Methanol Storage Tank (EP T09);
  - (xiii) The throughput for the Recovered Vinyl Acetate Storage Tanks (EP F01(19-));
  - (xiv) The throughput for the Acetic Acid Tanks (EP T11);
  - (xv) The throughput for the Dilute Acid Tank (EP A07);
  - (xvi) The throughput for the Acetic Acid Rundown Tanks (EP A08); and
  - (xvii) The throughput for the Inhibitor (BQ) Feed Tank (EP R04)
- b. The following parameters shall be continuously monitored for the Process Condensers of Polykettles PK1 - PK6 (F01(11C), F01(11E), F01(12C), F01(12E), F01(14C) and F01(14E):
- (i) Pressure,
  - (ii) Vent valve position, and
  - (iii) Inlet coolant temperature.

**5. Specific Recordkeeping Requirements:**

- a. Records shall be kept in accordance with **4. Specific Monitoring Requirements.**
- b. Actual VOC and particulate matter emissions shall be determined and recorded on a monthly and consecutive 12-month basis in accordance with **2. Emission Limitations, Compliance Demonstration Method.**
- c. The permittee shall maintain records of preventive maintenance and inspections of the control devices in accordance with **7. Specific Control Equipment Operating Conditions.**
- d. All records shall be maintained in accordance with **Section F.2.**

**6. Specific Reporting Requirements:**

For the emission points in **2. Emission Limitations**, the permittee shall report to the Division in accordance with **Section F** the consecutive 12-month totals of VOC and particulate matter emissions.

**7. Specific Control Equipment Operating Conditions:**

- a. The process condensers at EP F01(11C), F01(11E), F01(12C), F01(12E), F01(14C) and F01(14E) shall be in operation at all times the emission units exhausting to these condensers are operating.
- b. Preventive maintenance shall be performed, for all control devices, in accordance

**SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

- with the manufacturers' recommendations.
- c. The following parameters shall be continuously monitored for the process condensers at EP F01(11C), F01(11E), F01(12C), F01(12E), F01(14C) and F01(14E):
  - (i) Pressure
  - (ii) Vent valve position
  - (iii) Inlet coolant temperature
- d. The permittee shall maintain the flow rate and temperature of the scrubbing liquid at the scrubbers at EP S01 and S02 within the range recommended by the manufacturer or established during the most recent stack test.
- c. The 600 SAP Vent Scrubber at EP S01 and the Main Vent Scrubber at EP S02 shall be in operation at all times when emissions are vented to them.
- d. Also refer to **7. Specific Control Equipment Operating Conditions** in **Section B, WEDCO Area**, for specific baghouse operating conditions.
- e. Also refer to **Section B** for the Flare, EP F01.

**SECTION C - INSIGNIFICANT ACTIVITIES**

The following listed activities have been determined to be insignificant activities for this source pursuant to 401 KAR 52:020, Section 6. While these activities are designated as insignificant the permittee must comply with the applicable regulation and some minimal level of periodic monitoring may be necessary.

<u>Plant ID</u>	<u>Description</u>	<u>Generally Applicable Regulation</u>
1. W03	WEDCO 200 Line Fugitives	401 KAR 63:010
2. W06	WEDCO 250 Line Fugitives	401 KAR 63:010
3. W09	WEDCO 400 Line Fugitives	401 KAR 63:010
4. W13	WEDCO 600 Line Fugitives	401 KAR 63:010
5. W31(01)	Vacuum Cleaning System (Bulk Area) and Baghouse (FD-5758)	401 KAR 59:010 401 KAR 63:020
6. W35(01)	Bagging Operation Vacuum Cleaning System (Bulk Area) and Baghouse (FD-5763)	401 KAR 59:010 401 KAR 63:020
7. M08	Gasoline UST (FB-0003), 3,000 gallons, equipped with a permanent submerged fill pipe	401 KAR 59:050
8. M09	Diesel UST and Auxiliary Equipment, FB-0004	None

## SECTION D - SOURCE EMISSION LIMITATIONS AND TESTING REQUIREMENTS

1. As required by Section 1b of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26; compliance with annual emissions and processing limitations contained in this permit shall be based on emissions and processing rates for any twelve (12) consecutive months.
2. Volatile organic compound, hazardous air pollutant (HAP) and particulate emissions, measured by applicable reference methods, or an equivalent or alternative method specified in 40 C.F.R. Chapter I, or by a test method specified in the state implementation plan shall not exceed the respective limitations specified herein.
3. In order to preclude the applicability of 401 KAR 51:017, *Prevention of Significant Deterioration of Air Quality (PSD)*, the permittee shall comply with **Section B, Group Requirements**.

## **SECTION E - SOURCE CONTROL EQUIPMENT REQUIREMENTS**

Pursuant to 401 KAR 50:055, Section 2(5), at all times, including periods of startup, shutdown and malfunction, owners and operators shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Division which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.

## **SECTION F - MONITORING, RECORDKEEPING, AND REPORTING REQUIREMENTS**

1. Pursuant to Section 1b-IV-1 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26, when continuing compliance is demonstrated by periodic testing or instrumental monitoring, the permittee shall compile records of required monitoring information that include:
  - a. Date, place as defined in this permit, and time of sampling or measurements;
  - b. Analyses performance dates;
  - c. Company or entity that performed analyses;
  - d. Analytical techniques or methods used;
  - e. Analyses results; and
  - f. Operating conditions during time of sampling or measurement.
2. Records of all required monitoring data and support information, including calibrations, maintenance records, and original strip chart recordings, and copies of all reports required by the Division for Air Quality, shall be retained by the permittee for a period of five years and shall be made available for inspection upon request by any duly authorized representative of the Division for Air Quality [Sections 1b-IV-2 and 1a-8 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
3. In accordance with the requirements of 401 KAR 52:020 Section 3(1)h the permittee shall allow authorized representatives of the Cabinet to perform the following during reasonable times:
  - a. Enter upon the premises to inspect any facility, equipment (including air pollution control equipment), practice, or operation;
  - b. To access and copy any records required by the permit;
  - c. Sample or monitor, at reasonable times, substances or parameters to assure compliance with the permit or any applicable requirements.Reasonable times are defined as during all hours of operation, during normal office hours; or during an emergency.
4. No person shall obstruct, hamper, or interfere with any Cabinet employee or authorized representative while in the process of carrying out official duties. Refusal of entry or access may constitute grounds for permit revocation and assessment of civil penalties.
5. Summary reports of any monitoring required by this permit shall be submitted to the Regional Office listed on the front of this permit at least every six (6) months during the life of this permit, unless otherwise stated in this permit. For emission units that were still under construction or which had not commenced operation at the end of the 6-month period covered by the report and are subject to monitoring requirements in this permit, the report shall indicate that no monitoring was performed during the previous six months because the emission unit was not in operation [Sections 1b-V-1 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].



**SECTION F - MONITORING, RECORDKEEPING, AND REPORTING REQUIREMENTS (CONTINUED)**

6. The semi-annual reports are due by January 30th and July 30th of each year. All reports shall be certified by a responsible official pursuant to 401 KAR 52:020 Section 23. If continuous emission and opacity monitors are required by regulation or this permit, data shall be reported in accordance with the requirements of 401 KAR 59:005, General Provisions, Section 3(3). All deviations from permit requirements shall be clearly identified in the reports.
7. In accordance with the provisions of 401 KAR 50:055, Section 1 the owner or operator shall notify the Regional Office listed on the front of this permit concerning startups, shutdowns, or malfunctions as follows:
  - a. When emissions during any planned shutdowns and ensuing startups will exceed the standards, notification shall be made no later than three (3) days before the planned shutdown, or immediately following the decision to shut down, if the shutdown is due to events which could not have been foreseen three (3) days before the shutdown.
  - b. When emissions due to malfunctions, unplanned shutdowns and ensuing startups are or may be in excess of the standards, notification shall be made as promptly as possible by telephone (or other electronic media) and shall be submitted in writing upon request.
8. The owner or operator shall report emission related exceedances from permit requirements including those attributed to upset conditions (other than emission exceedances covered by Section F.7 above) to the Regional Office listed on the front of this permit within 30 days. Deviations from permit requirements, including those previously reported under F.7 above, shall be included in the semiannual report required by F.6 [Sections 1b-V, 3 and 4 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
9. Pursuant to 401 KAR 52:020, Permits, Section 21, the permittee shall annually certify compliance with the terms and conditions contained in this permit, by completing and returning a Compliance Certification Form (DEP 7007CC) (or an alternative approved by the regional office) to the Regional Office listed on the front of this permit and the U.S. EPA in accordance with the following requirements:
  - a. Identification of the term or condition;
  - b. Compliance status of each term or condition of the permit;
  - c. Whether compliance was continuous or intermittent;
  - d. The method used for determining the compliance status for the source, currently and over the reporting period.
  - e. For an emissions unit that was still under construction or which has not commenced operation at the end of the 12-month period covered by the annual compliance certification, the permittee shall indicate that the unit is under construction and that compliance with any applicable requirements will be demonstrated within the timeframes specified in the permit.

**SECTION F - MONITORING, RECORDKEEPING, AND REPORTING REQUIREMENTS (CONTINUED)**

- f. The certification shall be postmarked by January 30th of each year. Annual compliance certifications shall be mailed to the following addresses:

Division for Air Quality  
Paducah Regional Office  
130 Eagle Nest Drive  
Paducah, KY 42003

U.S. EPA Region 4  
Air Enforcement Branch  
Atlanta Federal Center  
61 Forsyth St.  
Atlanta, GA 30303-8960

Division for Air Quality  
Central Files  
803 Schenkel Lane  
Frankfort, KY 40601

10. In accordance with 401 KAR 52:020, Section 22, the permittee shall provide the Division with all information necessary to determine its subject emissions within thirty (30) days of the date the KYEIS emission survey is mailed to the permittee.

**SECTION G - GENERAL PROVISIONS****1. General Compliance Requirements**

- a. The permittee shall comply with all conditions of this permit. Noncompliance shall be a violation of 401 KAR 52:020 Section 3(1)(b) and a violation of Federal Statute 42 USC 7401 through 7671q (the Clean Air Act). Noncompliance with this permit is grounds for enforcement action including but not limited to termination, revocation and reissuance, revision or denial of a permit [Section 1a-3 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020 Section 26].
- b. The filing of a request by the permittee for any permit revision, revocation, reissuance, or termination, or of a notification of a planned change or anticipated noncompliance, shall not stay any permit condition [Section 1a-6 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
- c. This permit may be revised, revoked, reopened and reissued, or terminated for cause in accordance with 401 KAR 52:020, Section 19. The permit will be reopened for cause and revised accordingly under the following circumstances:
  - (1) If additional applicable requirements become applicable to the source and the remaining permit term is three (3) years or longer. In this case, the reopening shall be completed no later than eighteen (18) months after promulgation of the applicable requirement. A reopening shall not be required if compliance with the applicable requirement is not required until after the date on which the permit is due to expire, unless this permit or any of its terms and conditions have been extended pursuant to 401 KAR 52:020, Section 12;
  - (2) The Cabinet or the U. S. EPA determines that the permit must be revised or revoked to assure compliance with the applicable requirements;
  - (3) The Cabinet or the U. S. EPA determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit;
  - (4) New requirements become applicable to a source subject to the Acid Rain Program.

Proceedings to reopen and reissue a permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of the permit for which cause to reopen exists. Reopenings shall be made as expeditiously as practicable. Reopenings shall not be initiated before a notice of intent to reopen is provided to the source by the Division, at least thirty (30) days in advance of the date the permit is to be reopened, except that the Division may provide a shorter time period in the case of an emergency.

- d. The permittee shall furnish information upon request of the Cabinet to determine if cause exists for modifying, revoking and reissuing, or terminating the permit; or to determine compliance with the conditions of this permit [Sections 1a- 7 and 8 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
- e. Emission units described in this permit shall demonstrate compliance with applicable requirements if requested by the Division [401 KAR 52:020 Section 3(1)(c)].

## SECTION G - GENERAL PROVISIONS (CONTINUED)

- f. The permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such supplementary facts or corrected information to the permitting authority [401 KAR 52:020, Section 7(1)].
- g. Any condition or portion of this permit which becomes suspended or is ruled invalid as a result of any legal or other action shall not invalidate any other portion or condition of this permit [Section 1a-14 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
- h. The permittee shall not use as a defense in an enforcement action the contention that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance [Section 1a-4 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
- i. Except for requirements identified in this permit as state-origin requirements, all terms and conditions shall be enforceable by the United States Environmental Protection Agency and citizens. [Section 1a-15-b of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
- j. This permit shall be subject to suspension if the permittee fails to pay all emissions fees within 90 days after the date of notice as specified in 401 KAR 50:038, Section 3(6) [Section 1a-10 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
- k. Nothing in this permit shall alter or affect the liability of the permittee for any violation of applicable requirements prior to or at the time of permit issuance [401 KAR 52:020, Section 11(3)(b)].
- l. This permit does not convey property rights or exclusive privileges [Section 1a-9 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
- m. Issuance of this permit does not relieve the permittee from the responsibility of obtaining any other permits, licenses, or approvals required by the Cabinet or any other federal, state, or local agency.
- n. Nothing in this permit shall alter or affect the authority of U.S. EPA to obtain information pursuant to Federal Statute 42 USC 7414, Inspections, monitoring, and entry [401 KAR 52:020, Section 11(3)(d)].
- o. Nothing in this permit shall alter or affect the authority of U.S. EPA to impose emergency orders pursuant to Federal Statute 42 USC 7603, Emergency orders [401 KAR 52:020, Section 11(3)(a)].
- p. This permit consolidates the authority of any previously issued PSD, NSR, or Synthetic Minor source preconstruction permit terms and conditions for various emission units and incorporates all requirements of those existing permits into one single permit for this source.

**SECTION G - GENERAL PROVISIONS (CONTINUED)**

- q. Pursuant to 401 KAR 52:020, Section 11, a permit shield shall not protect the owner or operator from enforcement actions for violating an applicable requirement prior to or at the time of permit issuance. Compliance with the conditions of a permit shall be considered compliance with:
  - (1) Applicable requirements that are included and specifically identified in the permit and
  - (2) Non-applicable requirements expressly identified in this permit.

**2. Permit Expiration and Reapplication Requirements**

- a. This permit shall remain in effect for a fixed term of five (5) years following the original date of issue. Permit expiration shall terminate the source's right to operate unless a timely and complete renewal application has been submitted to the Division at least six months prior to the expiration date of the permit. Upon a timely and complete submittal, the authorization to operate within the terms and conditions of this permit, including any permit shield, shall remain in effect beyond the expiration date, until the renewal permit is issued or denied by the Division [401 KAR 52:020, Section 12].
- b. The authority to operate granted shall cease to apply if the source fails to submit additional information requested by the Division after the completeness determination has been made on any application, by whatever deadline the Division sets [401 KAR 52:020, Section 8(2)].

**3. Permit Revisions**

- a. A minor permit revision procedure may be used for permit revisions involving the use of economic incentive, marketable permit, emission trading, and other similar approaches, to the extent that these minor permit revision procedures are explicitly provided for in the SIP or in applicable requirements and meet the relevant requirements of 401 KAR 52:020, Section 14(2).
- b. This permit is not transferable by the permittee. Future owners and operators shall obtain a new permit from the Division for Air Quality. The new permit may be processed as an administrative amendment if no other change in this permit is necessary, and provided that a written agreement containing a specific date for transfer of permit responsibility coverage and liability between the current and new permittee has been submitted to the permitting authority within ten (10) days following the transfer.

**4. Construction, Start-Up, and Initial Compliance Demonstration Requirements**

Pursuant to a duly submitted application the Kentucky Division for Air Quality hereby authorizes the construction of the closed vent systems to vent the following equipment specified below to the flare, in accordance with the terms and conditions of this permit.

**F01(11A-11H) Polymerization 50 Line Reactors, Stripper and Auxiliary Equipment**  
Control Device: Will vent to Flare, BA-5000 (see Section B, EP F01) on or before the compliance date in 40 CFR 63.2445(b) for compliance with 40 CFR 63, Subpart FFFF  
Maximum Processing Rate: 79,000 lb/hr  
Construction Date: 1984, except F01(11G) installed in 1996

**SECTION G - GENERAL PROVISIONS (CONTINUED)**

Vent Condenser, HA-5050, is a MON Group 1 Process Vent

F01(12A-12E) **Polymerization 100 Line Reactors and Auxiliary Equipment**

Control Device: Will vent to Flare, BA-5000 (see Section B, EP F01) on or before the compliance date in 40 CFR 63.2445(b) for compliance with 40 CFR 63, Subpart FFFF

Maximum Processing Rate: 79,000 lb/hr

Construction Date: 1959, except F01(12C) installed in 1996

F01(13A-13C) **Polymerization 100 Line Stripper and Auxiliary Equipment**

Control Device: Will vent to Flare, BA-5000 (see Section B, EP F01) on or before the compliance date in 40 CFR 63.2445(b) for compliance with 40 CFR 63, Subpart FFFF

Maximum Processing Rate: 79,000 lb/hr

Construction Date: 1959

F01(14A-14E) **Polymerization 150 Line Reactors and Auxiliary Equipment**

Control Device: Will vent to Flare, BA-5000 (see Section B, EP F01) on or before the compliance date in 40 CFR 63.2445(b) for compliance with 40 CFR 63, Subpart FFFF

Maximum Processing Rate: 79,000 lb/hr

Construction Date: 1984

F01(15A-15C) **Polymerization 150 Line Stripper and Auxiliary Equipment**

Control Device: Will vent to Flare, BA-5000 (see Section B, EP F01) on or before the compliance date in 40 CFR 63.2445(b) for compliance with 40 CFR 63, Subpart FFFF

Maximum Processing Rate: 79,000 lb/hr

F01(16A-16D) **Paste Storage Tanks North Nest #1** (4), FB-5501, FB-5502, FB-5503 and FB-5504

Tank Description: Fixed Roof Tanks for receipt of paste from the Polymerization Area and for feed for SAP Area

Capacity: 51,000 gallons each

Control Device: Vapor Balancing (varying control efficiency); will vent to Flare, BA-5000 (see Section B, EP F01) on or before the compliance date in 40 CFR 63.2445(b) for compliance with 40 CFR 63, Subpart FFFF

Maximum throughput: 60,000,000 gallons/yr as methanol each

Construction Date: 1959

Maximum True Vapor Pressure: 10.8542 psia

MON Group 1 Storage Tanks

F01(17A-17D) **Paste Storage Tanks South Nest #2** (4), FB-5505, FB-5506, FB-5507 and FB-5508

Tank Description: Fixed Roof Tanks for receipt of paste from the Polymerization Area and for feed for SAP Area

Capacity: 51,000 gallons each

**SECTION G - GENERAL PROVISIONS (CONTINUED)**

Control Device: Vapor Balancing (varying control efficiency); will vent to Flare, BA-5000 (see Section B, EP F01) on or before the compliance date in 40 CFR 63.2445(b) for compliance with 40 CFR 63, Subpart FFFF

Maximum throughput: 60,000,000 gallons/yr as methanol each

Construction Date: 1959

Maximum True Vapor Pressure: 10.8542 psia

MON Group 1 Storage Tanks

F01(18A-18B) **Paste Storage Tanks West Nest #3 (2)**, FB-5509 and FB-5510

Tank Description: Fixed Roof Tanks

Capacity: 78,800 gallons each

Control Device: Venturi Scrubber, FH-5550, 95% control efficiency; will vent to Flare, BA-5000 (see Section B, EP F01) on or before the compliance date in 40 CFR 63.2445(b) for compliance with 40 CFR 63, Subpart FFFF

Maximum throughput: 60,000,000 gallons/yr as methanol

Construction Date: 1994

Maximum True Vapor Pressure: 10.8542 psia

MON Group 1 Storage Tanks

F01(19A-19C) **Recovered Vinyl Acetate Rework Storage Tanks (3)**, FB-5521, FB-5522 and FB-5523

Capacity: 14,800 gallons each

Construction Date: 1959

Control Device: Will vent to Flare, BA-5000 (see Section B, EP F01) on or before the compliance date in 40 CFR 63.2445(b) for compliance with 40 CFR 63, Subpart FFFF

Operating Scenario #1: Fixed roof tanks storing recovered vinyl acetate from the Vinyl Redistillation Tower (DA-5105)

Maximum throughput: 39,420,000 gallons/yr (total)

Maximum True Vapor Pressure: 2.2002 psia

Operating Scenario #2: Fixed roof tanks storing stripper overheads (primarily vinyl acetate) from the Vinyl Extraction Tower (DA-5104) during outages

Maximum throughput: 355,200 gallons/yr

Maximum True Vapor Pressure: 2.3622 psia

MON Group 1 Storage Tanks

- a. Construction of any process and/or air pollution control equipment authorized by this permit shall be conducted and completed only in compliance with the conditions of this permit.
- b. Within thirty (30) days following commencement of construction and within fifteen (15) days following start-up and attainment of the maximum production rate specified in the permit application, or within fifteen (15) days following the issuance date of this permit, whichever is later, the permittee shall furnish to the Regional Office listed on the front of this permit in writing, with a copy to the Division's Frankfort Central Office, notification of the following:
  - (1) The date when construction commenced.
  - (2) The date of start-up of the affected facilities listed in this permit.

**SECTION G - GENERAL PROVISIONS (CONTINUED)**

- (3) The date when the maximum production rate specified in the permit application was achieved.
- c. Pursuant to 401 KAR 52:020, Section 3(2), unless construction is commenced within eighteen (18) months after the permit is issued, or begins but is discontinued for a period of eighteen (18) months or is not completed within a reasonable timeframe then the construction and operating authority granted by this permit for those affected facilities for which construction was not completed shall immediately become invalid. Upon written request, the Cabinet may extend these time periods if the source shows good cause.
  - d. For those affected facilities for which construction is authorized by this permit, a source shall be allowed to construct with the proposed permit. Operational or final permit approval is not granted by this permit until compliance with the applicable standards specified herein has been demonstrated pursuant to 401 KAR 50:055. If compliance is not demonstrated within the prescribed timeframe provided in 401 KAR 50:055, the source shall operate thereafter only for the purpose of demonstrating compliance, unless otherwise authorized by Section I of this permit or order of the Cabinet.
  - e. This permit shall allow time for the initial start-up, operation, and compliance demonstration of the affected facilities listed herein. However, within sixty (60) days after achieving the maximum production rate at which the affected facilities will be operated but not later than 180 days after initial start-up of such facilities, the permittee shall conduct a performance demonstration on the affected facilities in accordance with 401 KAR 50:055, General compliance requirements. Testing must also be conducted in accordance with General Provisions G.5 of this permit.
  - f. Terms and conditions in this permit established pursuant to the construction authority of 401 KAR 51:017 or 401 KAR 51:052 shall not expire.

**5. Testing Requirements**

- a. Pursuant to 401 KAR 50:045 Section 2, a source required to conduct a performance test shall submit a completed Compliance Test Protocol form, DEP form 6028, or a test protocol a source has developed for submission to other regulatory agencies, in a format approved by the cabinet, to the Division's Frankfort Central Office a minimum of sixty (60) days prior to the scheduled test date. Pursuant to 401 KAR 50:045, Section 7, the Division shall be notified of the actual test date at least Thirty (30) days prior to the test.
- b. Pursuant to 401 KAR 50:045 Section 5, in order to demonstrate that a source is capable of complying with a standard at all times, any required performance test shall be conducted under normal conditions that are representative of the source's operations and create the highest rate of emissions. If [When] the maximum production rate represents a source's highest emissions rate and a performance test is conducted at less than the maximum production rate, a source shall be limited to a production rate of no greater than 110 percent of the average production rate during the performance tests. If and when the facility is capable of operation at the rate specified in the application, the source may retest to demonstrate compliance at the new production rate. The Division for Air Quality may waive these requirements on a case-by-case basis if the source demonstrates



## SECTION G - GENERAL PROVISIONS (CONTINUED)

to the Division's satisfaction that the source is in compliance with all applicable requirements.

- c. Results of performance test(s) required by the permit shall be submitted to the Division by the source or its representative within forty-five days or sooner if required by an applicable standard, after the completion of the fieldwork.

### 6. Acid Rain Program Requirements

- a. If an applicable requirement of Federal Statute 42 USC 7401 through 7671q (the Clean Air Act) is more stringent than an applicable requirement promulgated pursuant to Federal Statute 42 USC 7651 through 7651o (Title IV of the Act), both provisions shall apply, and both shall be state and federally enforceable.
- b. The permittee shall comply with all applicable requirements and conditions of the Acid Rain Permit and the Phase II permit application (including the Phase II NO<sub>x</sub> compliance plan and averaging plan, if applicable) incorporated into the Title V permit issued for this source. The source shall also comply with all requirements of any revised or future acid rain permit(s) issued to this source.

### 7. Emergency Provisions

- a. Pursuant to 401 KAR 52:020, Section 24(1), an emergency shall constitute an affirmative defense to an action brought for the noncompliance with the technology-based emission limitations if the permittee demonstrates through properly signed contemporaneous operating logs or relevant evidence that:
  - (1) An emergency occurred and the permittee can identify the cause of the emergency;
  - (2) The permitted facility was at the time being properly operated;
  - (3) During an emergency, the permittee took all reasonable steps to minimize levels of emissions that exceeded the emissions standards or other requirements in the permit; and
  - (4) Pursuant to 401 KAR 52:020, 401 KAR 50:055, and KRS 224.01-400, the permittee notified the Division as promptly as possible and submitted written notice of the emergency to the Division when emission limitations were exceeded due to an emergency. The notice shall include a description of the emergency, steps taken to mitigate emissions, and corrective actions taken.
  - (5) This requirement does not relieve the source of other local, state or federal notification requirements.
- b. Emergency conditions listed in General Condition G.7.a above are in addition to any emergency or upset provision(s) contained in an applicable requirement [401 KAR 52:020, Section 24(3)].
- c. In an enforcement proceeding, the permittee seeking to establish the occurrence of an emergency shall have the burden of proof [401 KAR 52:020, Section 24(2)].

## SECTION G - GENERAL PROVISIONS (CONTINUED)

### 8. Ozone Depleting Substances

- a. The permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR 82, Subpart F, except as provided for Motor Vehicle Air Conditioners (MVACs) in Subpart B:
  - (1) Persons opening appliances for maintenance, service, repair, or disposal shall comply with the required practices contained in 40 CFR 82.156.
  - (2) Equipment used during the maintenance, service, repair, or disposal of appliances shall comply with the standards for recycling and recovery equipment contained in 40 CFR 82.158.
  - (3) Persons performing maintenance, service, repair, or disposal of appliances shall be certified by an approved technician certification program pursuant to 40 CFR 82.161.
  - (4) Persons disposing of small appliances, MVACs, and MVAC-like appliances (as defined at 40 CFR 82.152) shall comply with the recordkeeping requirements pursuant to 40 CFR 82.166
  - (5) Persons owning commercial or industrial process refrigeration equipment shall comply with the leak repair requirements pursuant to 40 CFR 82.156.
  - (6) Owners/operators of appliances normally containing 50 or more pounds of refrigerant shall keep records of refrigerant purchased and added to such appliances pursuant to 40 CFR 82.166.
- b. If the permittee performs service on motor (fleet) vehicle air conditioners containing ozone-depleting substances, the source shall comply with all applicable requirements as specified in 40 CFR 82, Subpart B, *Servicing of Motor Vehicle Air Conditioners*.

### 9. Risk Management Provisions

- a. The permittee shall comply with all applicable requirements of 401 KAR Chapter 68, Chemical Accident Prevention, which incorporates by reference 40 CFR Part 68, Risk Management Plan provisions. If required, the permittee shall comply with the Risk Management Program and submit a Risk Management Plan to:

RMP Reporting Center  
P.O. Box 1515  
Lanham-Seabrook, MD 20703-1515.

- b. If requested, submit additional relevant information to the Division or the U.S. EPA.

## **SECTION H - ALTERNATE OPERATING SCENARIOS**

For the pipeline equipment in the Polymerization, Polyrectification, SAP, Tank Farm, and Loading Areas, subject to 40 CFR 63.2480(a) and Table 6 to Subpart FFFF, the permittee may comply with one of the following requirements.

- a. Subpart UU of 40 CFR 63 and the requirements referenced therein, except as specified in §63.2480(b) and (d);
- b. Subpart H of 40 CFR 63 and the requirements referenced therein, except as specified in §63.2480(b) and (d); or
- c. 40 CFR 65, subpart F and the requirements referenced therein, except as specified in §63.2480(c) and (d).

**SECTION I - COMPLIANCE SCHEDULE**

None